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Makers and mongers: Exploring social networks of Vermont artisan cheese

Rachel Anne DiStefano

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MAKERS AND MONGERS:
EXPLORING SOCIAL NETWORKS OF VERMONT ARTISAN CHEESE

A Thesis Presented

by

Rachel A. DiStefano

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of

The University of Vermont

In Partial Fulfillment of the Requirements
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Specializing in Food Systems

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Accepted by the Faculty of the Graduate College, The University of Vermont, in partial fulfillment of the requirements for the degree of Master of Science, specializing in Food Systems.

Thesis Examination Committee:

Amy B. Trubek, Ph.D. Advisor

Paul S. Kindstedt, Ph.D.

Christopher J. Koliba, Ph.D. Chairperson

Cynthia J. Forehand, Ph.D. Dean, Graduate College

Date: May 16, 2014

Abstract

Vermont is widely-regarded as a hub for artisan cheese production, with more cheesemakers per capita than any other US state. Despite significant local and statewide support, out-of-state markets are essential to the long-term success of these small-scale producers. In spatially extended supply chains, retailers occupy a pivotal position. This thesis aims to examine the intermediary role of retailers in building social networks between producers and consumers. Consumers appreciate Vermont artisan cheese, in part, because it is embedded in a complex network of social values and relations related to where and how it is produced. Guided by social theories of consumption, sensory experience, and exchange, a transdisciplinary, mixed-methods study was conducted in order to better understand cheese retailers' role in this network.

First, participant observation and ethnographic interviews at a specialty cheese shop demonstrated how highly specialized cheese retail professionals (known as a cheesemongers) communicate social information about Vermont artisan cheese to consumers in practice. Specialized narratives are transmitted to consumers through in-store signage and social interactions. These stories also involve the cheesemonger as traveler, developing specialized knowledge of Vermont artisan cheese by traveling to the place of production. A second site of participant observation at a national conference for artisan cheese professionals added breadth to the study. While cheesemongers appear to agree that a certain level of intrinsic quality is necessary for consumer acceptance and preference, many also see the importance of, and derive pleasure from, knowing and conveying the social story, and perceive this to be an important part of their professional role and identity.

Second, social network analysis provided a broader examination of relationships between Vermont artisan cheesemakers and retailers in the region. In order to collect data on these relationships, an online survey was distributed to Vermont artisan cheesemakers and follow-up phone calls were conducted. A combination of statistical and network analyses was used to visualize the social structure of the network, identify key actors, and examine qualities of the relationships. The findings suggest that the social network for Vermont artisan cheese is a multiplex system, in which a cheesemaker's relative position in the network is the result of a complex balance—and sometimes compromise—between a cheesemaker's needs, goals, and desires and their various retailers' needs, goals, and desires. Moreover, geographic proximity, time, experience, convenience, cost, history, loyalty, and regard all appear to be important factors in the type of relationship cheesemakers have with retailers, and whether a relationship is established at all.

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CHAPTER ONE

INTRODUCTION

Vermont is a hub for artisan cheese production, boasting a wide variety of high-quality award-winning cheeses and more artisan cheesemakers per capita than any other U.S. state (Sakovitz-Dale, 2006). As a value-added food, artisan cheese allows small-scale agricultural producers to earn a livelihood while preserving and promoting the bucolic “working landscape” that Vermonters and tourists value (Paxson, 2013). It is also a highly visible part of the local food movement and culture in Vermont—a fixture both at farmers’ markets and on the menus of many popular farm-to-table restaurants. Moreover, state policymakers recognize artisan cheese production as an integral part of Vermont’s food system and a key to agricultural and economic development (Vermont Sustainable Jobs Fund, 2011a). While the importance of local and statewide support for Vermont cheese should not be diminished, the reality of in-state saturation suggests that the continued success of these artisan producers depends on strong out-of-state markets.

More than simply carrying economic value for cheesemakers and the state, Vermont artisan cheese embodies a range of social and cultural values related to *where* and *how* it is produced. For instance, values about environmental sustainability, animal welfare, community development, and craftsmanship have emerged from research with both consumers and producers of Vermont artisan cheese (Lahne & Trubek, 2013; Paxson, 2013). It is becoming increasingly clear that these social values not only make artisan cheese “good” to consume; they also make it taste better (Lahne, Trubek, & Pelchat, 2014). As such, the sensory quality of Vermont artisan cheese is as much a result of physical landscapes and production practices as it is of a particular flavor profile.

Given that social values are crucial to both the symbolic meaning and sensory experience of Vermont artisan cheese, the current challenge lies in how to effectively communicate these intangibles to consumers—especially those outside of Vermont, in urban areas, who may not have any knowledge or experience of the unique social context of Vermont artisan cheese production. In these spatially extended supply chains, retailers—and, in particular, highly specialized retail professionals known as cheesemongers—occupy an important position and warrant further study.

Study Purpose & Research Questions

This thesis research was undertaken to expand our understanding of the role of cheese retail professionals in communicating social values to consumers in regional supply chains. It addresses the need to better understand *how* specialized social knowledge is communicated in practice, and how this influences sensory experience and preference for Vermont artisan cheese. On a broader level, the research aimed to use and explore the concept of social networks as it relates to the retail of Vermont artisan cheese.

Four main questions guided the research:

1. How do cheesemongers obtain specialized social knowledge about Vermont artisan cheese and transmit that knowledge to consumers outside of Vermont?
2. How do cheesemongers use social stories to build consumer sensory preference for Vermont artisan cheese outside of Vermont?
3. What is the role of cheese retailers in building social networks around Vermont artisan cheese?
4. How can social network analysis help to illuminate the relationships between producers of Vermont artisan cheese and retailers in a regional supply chain?

Definition of Key Terms

Artisan cheese is defined by the American Cheese Society as cheese that is produced “primarily by hand, in small batches, with particular attention paid to the tradition of the cheesemaker’s art,” using “as little mechanization as possible” (American Cheese Society, 2011). The term *farmstead cheese* requires that a cheese was “made with milk from the farmer’s own herd, or flock, on the farm where the animals are raised” (American Cheese Society, 2011). Most farmstead cheeses are also artisanal; however artisanal cheeses that are produced with milk from an “outside source”—even if it is from a nearby farm—cannot be called farmstead (though the two terms are often, mistakenly, used interchangeably). This research focused on the more inclusive category of *artisan*.

A *cheesemonger* is a highly specialized retailer of artisan cheese. The word *monger* refers to someone who sells or deals a good; by this logic, a *cheesemonger* is simply someone who sells cheese. For the purpose of this study, however, a stricter definition was used, such that a *cheesemonger* is someone who not only sells cheese but also sources and promotes it, and who has very specialized knowledge and expertise. The term *retailer* is used more broadly in the research to indicate a retail food store.

In this research, the term *sensory quality* is used to refer to a subjective view of food quality that relies on both *intrinsic* properties, which reside inside of the food and are organoleptic (i.e., sensory) in nature, and *extrinsic* attributes, which reside outside of the food and are social in nature (e.g., from Vermont, handmade, small-scale production).

Finally, while a more detailed definition will be provided later in the chapter, at its most basic a *social network* is the set of relationships among a group of actors, often belonging to a common group or organization.

History & Background

“Her future glory would reside not in quantity of cheese produced but in a tenacious commitment to quality and craftsmanship in an era when much of the industry succumbed to an unhealthy preoccupation with cost, efficiency, and standardization” – Kindstedt (2005, p. 26), foreshadowing Vermont’s current success in artisan cheese production after falling in the early to mid-19th century from its status as a cheesemaking “juggernaut.”

People have been making cheese in Vermont since the early 19th century—both for consumption on the farm and for regional markets—and of the approximately 40-50 licensed cheesemakers in the state today, three can lay claim to this more-than-a-century’s-old history (Ogden, 2008). In general, however, it is only in the last twenty years that the American artisanal cheese movement has blossomed. As Kindstedt (2005) describes, once a “juggernaut” for cheese, small Vermont dairy farms lost their hold as people and knowledge of cheesemaking moved to the West. More cheesemakers and larger scales of production, followed by the establishment of factories that could pump out homogenous blocks of Cheddar, pushed Vermont—and artisanal farmstead cheeses—off the map from around 1850 to the late 20th century (Kindstedt, 2005).

The recent “renaissance” of artisan cheese in the U.S., as Paxson (2013) explains, has roots in the 1970s with back-to-the-land, feminist, and other countercultural movements. Consumer interest reemerged among a new demographic in the mid-1990s, as Americans who traveled to Europe experienced and learned to appreciate artisan cheeses and then sought them out back home in stores and restaurants. As the prices for European cheeses rose due to changing global economics, the U.S. market opened up for American entrepreneur-producers. In this way, Paxson (2013) writes, “consumer interest in domestic cheese has piggybacked on broader consumption of European cheeses” (p. 26). No longer a countercultural activity, American artisanal cheese production is

increasingly becoming part of the mainstream, as evidenced by the high number, quality, and variety of American-made cheeses, and the continued growth of the American Cheese Society, whose membership currently stands at around 1,500 cheesemakers, retailers, distributors, academics, and consumers (American Cheese Society, 2011).

Paxson also notes that this recent surge in popularity has come alongside a new “taste for locally sourced, nonindustrial foods” (2006, p. 204). Indeed, artisan cheese is a highly visible part of the local food movement in Vermont. For instance, a study by the Vermont Housing and Conservation Board on Vermont farmstead cheese found that, of the 50-60% that stays in Vermont, 22% is sold at farmers’ markets and 12% is sold straight from the farm (Sakovitz-Dale, 2006). Moreover, many restaurants are including artisan cheese in their farm-to-plate efforts, featuring local cheeses and cheesemakers on their menus. Yet, in a rural state of just over 625,000 people, there is not enough consumer demand to meet the supply of high-quality artisan cheese currently being produced here.

Consequently, current legislative policy in Vermont strongly supports a more expansive geographic vision of artisan cheese distribution and consumption. The approval in 2009 of the Farm to Plate (F2P) Investment Program, a state-wide initiative to strengthen Vermont’s food system, led to the development of a 10-year strategic plan, whose “ultimate purpose is to encourage policies and strategic investments that accelerate the movement toward strong local and regional food systems” (Vermont Sustainable Jobs Fund, 2011a, p. 4). A primary goal of F2P is to increase consumption of Vermont-produced food by both local (defined as Vermont + 30 miles) *and* regional (defined as New England, New York, and southern Quebec) consumers. In the foreword to the F2P

Executive Summary, Governor Peter Shumlin suggests that Vermont food producers have not fully capitalized on receptive regional markets: “Expanding our agricultural development efforts will allow Vermont to take advantage of our proximity to the over 38 million consumers within a 200-mile radius of our borders. These regional markets value the Vermont brand and are primed to buy more of our high-quality products” (p. 1).

Furthermore, an appendix to the F2P Strategic Plan regarding Vermont’s dairy industry specifically highlights the need for artisan cheese producers to pursue regional markets:

One of the principal reasons for cheese makers to go to the trouble of reaching out-of-state consumer markets is to avoid saturating the in-state market ... Larger concentrations of consumers, especially those who are used to paying gourmet prices for premium-quality foods, offer an outlet for cheese that won’t be consumed in Vermont. (Vermont Sustainable Jobs Fund, 2011b, p. 53)

This notion of saturation implies that there is not enough of a “local” artisanal cheese market to support the state’s 40-50 producers. Taken together, the F2P policy documents suggest that securing regional markets for Vermont agricultural products, such as artisan cheese, is important to the vitality and long-term stability of Vermont’s cheesemakers and broader food system.

Yet, regional market expansion for Vermont artisan cheese is not as simple as F2P makes it out to be, with regard to both producers’ ability to get their cheese to distant retail outlets, as well as their ability to communicate specialized knowledge to consumers. For cheesemakers to “go to the trouble” of reaching out-of-state markets means figuring out logistical considerations related to cost, packaging, and transport, as well as ensuring the safety and quality of the product along the way. Once the product arrives at its regional destination, the assumption that consumers are “primed to buy” the

Vermont brand suggests an almost effortless, isolated economic transaction. This narrative ignores the fact that human behavior, including economic behavior, is situated within larger social structures and embedded in complex networks of social relations (Granovetter, 1985). Indeed, it is increasingly clear that a diverse and complex array of noneconomic reasons exist for why people like—and buy—Vermont artisan cheese.

Consumer Preference

The higher price paid for specialty artisan cheeses, as compared to standardized, “commodity” cheeses found in supermarkets, suggests that consumers see value beyond the food’s intrinsic (i.e., material) properties. A conjoint analysis with consumers from Vermont, New York City, and Boston found that production method and region are important factors in their willingness to pay more for cheese, with increased preference for artisan and localized production, respectively (Thompson, 2012). As defined earlier, the word *artisan* implies that a cheese is handmade and requires an element of craftsmanship. *Localized production* is a more nebulous term. Interestingly, it has been noted that Vermont-made cheeses are often labeled “local” in New York City stores—stores which, by the F2P definition, would be considered regional (Vermont Sustainable Jobs Fund, 2010). This suggests that perceptions of “local” and “regional” may vary depending on the context, including location (e.g., urban versus rural) and the type of product being sold (e.g., unique specialty products versus everyday commodities).

In the case of Vermont artisan cheese, the *place* of production likely adds to consumer appeal. With its agricultural tradition and rural “working landscape,” Vermont lends itself well to the image of the “bucolic family farm,” which Paxson (2006, p. 214) suggests is part of the sentiment that helps to sell high-quality cheeses. A 2006 marketing

study conducted by the Vermont Housing and Conservation Board on farmstead cheese reports a similar finding:

Many distributors remarked that it is the “back story” behind Vermont farmstead cheeses that brings consumers to these labels and that it is the cheese itself that keeps them coming back. Consumers love the idea of eating a unique cheese that was hand-made in small batches on a farm in Vermont especially if it is both delicious and scarce. (Sakovitz-Dale, p. 14)

Thus, at least from the perspective of those on the ground, consumer preference for Vermont artisan cheese is a result of both intrinsic and extrinsic attributes of the food.

To better understand the complex array of reasons why consumers like Vermont artisan cheese, Lahne and Trubek (2013) conducted focus group interviews with Vermont artisan cheese consumers around Vermont and Boston, MA. As expected, emergent themes included the “farm story,” which encompasses “what consumers know about the location of the farm, the milking animals and their relationship to the cheesemaker, and the history of the cheesemakers and farm,” and an “ethos of craftsmanship,” which centers on “how the cheesemaker worked with the cheese itself: the amount of effort put into the product, the tools used, and ideas of rigor in craftsmanship” (Lahne & Trubek, 2013, p. 24-25). In other words, consumers like Vermont artisan cheese, at least in part, because of factors that exist outside of the cheese itself.

More than just increasing consumer liking, it appears that this farm- and cheese-specific information becomes part of an individual’s subjective physiological experience when eating, actually making the cheese taste better. Lahne, Trubek, and Pelchat (2014) demonstrated this positive effect of extrinsic information on sensory experience using consumer acceptance tests with four different Vermont artisan cheeses. In general, they found that consumers who received specialized social information about a given cheese’s

production context or practices (e.g., the farm story) reported liking it more than consumers who tasted the exact same cheese but received more generic information (e.g., how a cheddar style of cheese is made). These findings suggest that everyday sensory experience relies on a mixture of sensory stimuli and social information.

While the social and cultural values that are so critical to appreciating Vermont artisan cheese are easily observed in the state (e.g., by interacting with cheesemakers at farmers' markets or by having firsthand knowledge of what a farm and rural landscape looks like), outside of Vermont the unique social context of artisan cheesemaking is less obvious. Consequently, in regional locales cheese retail professionals act as intermediaries between producers and consumers by transmitting specialized knowledge about Vermont artisan cheese. Indeed, the focus group interviews confirmed the importance of cheese retail professionals to consumers' experience of Vermont artisan cheese (Lahne & Trubek, 2013). It appears that, especially in urban areas outside of the state, cheesemongers help create and strengthen social networks that bring the artisan cheese producer and consumer together. This study attempts to build on these findings by seeking to better understand this intermediary role of cheesemongers, which has been largely overlooked in previous research on artisan cheese.

Social Networks

Although sparse, the existing literature on cheesemongers indicates that they form social relationships with both artisan cheese producers and consumers, and occupy a pivotal position between the two by conveying specialized social information. These relationships are illuminated by the lens of network theory. Graphically, networks are composed of nodes (i.e., points of connection) and ties (i.e., the lines between them). In a

social network the nodes are actors (e.g., people, organizations) and the ties are instances of social relations (e.g., interactions, kinship) (Borgatti, 2002). Thus, *social network analysis* (SNA) is the study of the social relations among a set of actors. According to Scott (2000): “Social network analysis emerged as a set of methods for the analysis of social structures, methods that specifically allow an investigation of the relational aspects of these structures” (p. 38). Thus, SNA takes a non-reductionist, holistic approach by focusing on the system as a whole rather than the individual elements (Borgatti, 2002), making it well-suited for food systems research.

In outlining the basic social network perspective, Wasserman and Faust (1994) identify a couple of central principles. First, network actors and their actions are viewed as interdependent. Second, the relational ties between actors are channels for the transfer, or “flow,” of resources, both material (e.g., money) and nonmaterial (e.g., information). Given these basic definitions and concepts, SNA appears to be a useful tool for visualizing the social structure of the Vermont artisan cheese network, as well as to better understand the flow of social information through the cheesemonger conduit. Yet, while SNA has been used in a multitude of disciplines to study a wide variety of social groups, structures, and phenomena, its application in food systems is more novel.

While most people associate SNA with quantitative tools and techniques—numerical data, mathematical graphs, matrices—the question of how to best study social networks appears to be unanswered. According to Jack (2010), this is due to the fact that:

Networks are complex: take many forms; are fluid, flexible, and dynamic, constantly changing and evolving ... So, their study is compounded by many factors. Consequently, it is important to use different research approaches to consider networks as each approach is differentially suited to the analysis of

particular kinds of problems, enabling a fuller and more complete understanding of the whole. (p. 134)

In recent years network researchers have shown increased support for a mixed-methods approach. Whereas quantitative methods are “useful in highlighting structural features of networks,” (Jack, 2010, p. 120) qualitative methods “provide more detailed demonstrations of what is actually going on within a network” (p. 123). Similarly, Edwards and Crossley (2009) explain the benefits and limitations of each approach:

Where quantitative network analysis brackets out details of relations in order to better comprehend the larger patterns they cumulatively give rise to, qualitative analysis brackets out questions regarding the larger patterns in an effort to deepen our understanding of the details. (p. 41)

Taken together, this suggests the power of adopting a mixed-methods approach to ensure more comprehensive, complete, and “rounded” findings (Jack, 2010, p. 123).

Summary of Introduction

In sum, the major goals of this thesis are as follows: (a) Use a mixed-methods approach to better understand the role of cheese retailers in the regional Vermont artisan cheese social network; (b) Explore how cheese retailers shape consumer sensory preference for Vermont artisan cheese through social stories; (c) Examine the social structure of relationships between Vermont artisan cheese producers and retailers in a regional network; and (d) Provide practical information to stakeholders, including cheesemakers and state policymakers, regarding the role of social values, relationships, and networks in building and maintaining strong, viable regional food systems.

Organization of the Thesis

The thesis is organized into seven chapters. Following this introductory chapter, Chapter 2 provides a comprehensive literature review, Chapter 3 describes the research

methodology and methods for the ethnography, and Chapter 4 is an ethnographic narrative. Chapter 5 then outlines the methods for the social network analysis, and Chapter 6 reports and discusses these results. Finally, Chapter 7 integrates major findings from both methods, summarizes key findings of the study, identifies limitations, and discusses implications for research and policy.

CHAPTER TWO

LITERATURE REVIEW

This chapter offers a comprehensive framework drawn from theoretical and practical literature relating to food, culture, and consumption; taste and sensory experience; commodities and exchange; and alternative food networks. Relevant literature on artisan cheese, Vermont, and scale in food systems is also reviewed. While the overarching theoretical framework is anthropological in nature, given the transdisciplinarity of food systems, I review scholarship from a variety of disciplines, including cultural anthropology, economic sociology, rural geography, and marketing.

Food & Culture

“We do not live by bread alone ... our hearts and our heads are intimately connected to our stomachs” – Mintz (1996, p. 48)

Across several academic disciplines – most notably anthropology, human geography, and rural sociology – there is a burgeoning body of literature built on the central tenet that food is social, cultural, and complex. Much more than a substance necessary for physical survival, or a mere vehicle for nutrients, food is a source of meaning and identity for both individuals and groups. In the words of Mintz (1996): “What the food is, how people come to have it, how it is prepared, whether it is plentiful or scarce, under what circumstances it is available—all of these circumstances, and many others, are integrated into what the food means” (p. 8).

The roots of this modern social tenet go back to Barthes’ (1961/2013) proposal that, when consuming food, an individual does not “manipulate a simple object in a purely transitive fashion; this item of food sums up and transmits a situation; it

constitutes an information; it signifies” (p. 24). This view of food as a system of communication, capable of signifying a variety of situations, themes, and behaviors, is not limited to consumption; its capacity to carry social messages, encode social events, and express social relations (Appadurai, 1981) has been observed and documented in the realms of cooking (Levi-Strauss, 1966/2013), household meals (Douglas, 1972), food preparation (Allison, 1991), and food exchange (Appadurai, 1981). Appadurai (1981) suggests that food has a universal capability to be symbolic, stemming from both its status as “a constant need but a perishable good” and its “capacity to mobilize strong emotions” (p. 494); yet, he argues that this potential must be “animated by particular cultural concepts and mobilized by particular social contexts” (p. 509).

Over the past half-century, anthropologists and sociologists have proceeded to demonstrate the symbolic meaning of food within and across a variety of social and cultural contexts. In his study of the “semiotic virtuosity of food” in Hindu South Asia, Appadurai (1981) identified dual and opposite symbolic functions of food exchange related to social relations, in some cases building or maintaining relations “characterized by equality, intimacy, or solidarity,” while in other cases building or maintaining relations “characterized by rank, distance, or segmentation” (p. 496). He concludes: “Any specific semiotic outcome is a matter of the particular food substance, the actors involved in the transaction, and the context and audience of their transaction” (p. 496). Thus, not only is food symbolism culture-specific, but it is highly contextual (p. 509).

Food can also be a powerful ideological and political tool *across* cultures, capable of embedding ideals and values that are shared, communicated, and literally transported across long distances. An exemplar case is the Slow Food International organization,

which works to protect and promote biodiversity, traditional foods, and small-scale artisanal food production. In doing so, food items identified—or reinvented—as “endangered” traditions become symbols of national or regional cuisines and cultures (Leitch, 2009/2013). Slow Food, which began as a small grassroots movement in Italy, has grown to be an organizing structure for thousands of producers and consumers in 150 countries who share a set of food-related values, thereby “managing to galvanize large numbers of people” to lobby for “the protection of both cultural landscapes and niche-food producers internationally” (Leitch, 2009/2013, p. 422). Thus, in the half-century since Barthes first wrote about food as communication, the idea that food is inextricably bound up in culture has become the basis for a global dialogue and social movement.

Consumption

“Consumption activity is the joint production, with fellow consumers, of a universe of values” – Douglas and Isherwood (1978, p. 67)

These discussions of food are located within a broader theoretical framework that views all material consumer goods as capable of signifying, communicating, and carrying cultural meaning (Douglas & Isherwood, 1978). Building off of this, McCracken (1988) posits that the meaning carried by goods is “constantly in transit ... flowing to and from its several locations in the social world, aided by the collective and individual efforts of designers, producers, advertisers, and consumers” (p. 71). Consumers then use this meaning “to express cultural categories and principles, cultivate ideals, create and sustain lifestyles, construct notions of the self, and create (and survive) social change” (p. xi). In this way, consumption is a social and cultural phenomenon integral to everyday life.

Yet, predominant theories of consumption originating from the field of economics largely fail to capture this social and cultural significance. A basic understanding of traditional utility theory tells us that economists treat consumers as “rational” individuals who make choices about what they purchase on the basis of price—buying less as prices go up, and more as prices go down—and income. In their critique of the rational actor model, Douglas and Isherwood (1978) point out that even those in the field of economics have recognized that these monetary factors do not effectively predict consumption behavior, especially on a long-term basis. As early as 1973, economists at the National Bureau of Economic Research found weakness in the dominant theory of their field:

To whatever extent income and prices do not explain observed behavior the explanation rests with variations in tastes ... For economists to rest a large part of their theory of choice on differences in tastes is disturbing, since they admittedly have no useful theory of the formation of tastes, nor can they rely on a well-developed theory of tastes from any other discipline in the social sciences, since none exists (Michael & Becker, p. 380).

As we will see in the next section, we are still—forty years later—looking for a theory that captures the complexity of taste as an everyday phenomenon and practice.

In addition to the inability of traditional economic theories of consumer behavior to explain variation in tastes, anthropologists and sociologists have argued that they fail to represent the social reality of human nature. For instance, Douglas and Isherwood (1978) critique the economic cornerstone of a “rational” individual isolated from his or her social context: “It is clearly absurd to aggregate millions of individuals buying and using goods without reckoning with the transformations they affect by sharing consumption together” (p. 5). Echoing this sentiment, Appadurai (1988) writes: “Consumption is eminently social, relational, and active rather than private, atomic, or

passive,” and, as such, “demand is a socially regulated and generated impulse, not an artifact of individual whims or needs” (p. 32).

In a similar vein, economic sociologist Mark Granovetter (1985) developed the concept of *embeddedness* to describe how all human behavior—including economic activity—is embedded in larger social structures:

Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations. (p. 487)

Thus, *social embeddedness* of the economy refers to “the extent to which economic action is linked to or depends on action or institutions that are non-economic in content, goals or processes” (2005, p. 35). Thus, Granovetter (1985) uses embeddedness to critique the notion of “rational” economic behavior: “What looks to the analyst like nonrational behavior may be quite sensible when situational constraints, especially those of embeddedness, are fully appreciated” (p. 506). Hinrichs (2008) confirms that an embeddedness perspective “encourages consideration of an even wider range of interests and motivations undergirding economic behavior” (pp. 510-511), and extends its application beyond consumers to producers.

While critiques of the rational actor model come from the fields of both anthropology and sociology, Hinrichs (2008) summarizes three areas of overlap that are important contributions to the theoretical framework of this research: (1) “the economy” includes any human activity related to production, exchange or consumption; (2) the economic realm is “nested” within both society and culture; and (3) the notion of

“autonomous, atomized economic actors” is rejected, “stressing instead the social and cultural context of human action” (p. 509).

In light of the theoretical weaknesses outlined above, anthropologists have tried to restore a social and cultural dimension to consumption and consumer goods. A major obstacle to achieving this, identified by Douglas and Isherwood (1978) and McCracken (1988), is the generally negative attitude towards consumption—especially materialism—held by the public and scholars alike. In their book, The World of Goods (1978), Douglas and Isherwood observe that, in contrast to goods that are required for physical subsistence and survival (i.e., *necessities*), goods that serve needs beyond subsistence (i.e., *luxuries*) are frequently demeaned as “artificial wants, false, luxurious, even immoral” (p. 17). Rejecting this “widespread and misleading distinction between goods that sustain life and health and others that service the mind and heart—spiritual goods” (p. 72-73), the authors posit: “Goods are neutral, their uses are social; they can be used as fences or bridges” (p. 12). Thus, there is nothing inherently wrong with, or bad about, consumption. More than thirty years later, however, it is unclear whether the cultural attitude has changed, or whether obloquy against materialism continues to prevent understanding and appreciation of the cultural significance of our everyday acts as consumers.

After establishing the neutral character and social function of goods, Douglas and Isherwood (1978) present a theoretical framework that views consumption as an information system, where goods are used by consumers for communicating and making sense of the world. In this system, goods are both symbolic—“endowed with values by the agreement of fellow consumers” (p. 75)—and material markers of culture, such that “[g]oods assembled together in ownership make physical, visible statements about the

hierarchy of values to which their chooser subscribes” (p. 5). Within this framework, the consumer’s “overriding objective is a concern for *information* about the changing cultural scene” (p. 95, emphasis added).

McCracken (1988) combines insights from the fields of anthropology and consumer behavior to further examine the interdependent relationship between culture and consumption, which he broadens to include all “processes by which consumer goods and services are created, bought, and used” (xi). He focuses his theoretical discussion on the mobile quality of meaning, exploring mechanisms both for how meaning gets into goods and how consumers get meaning out of goods. According to McCracken, meaning originates from the *culturally constituted world*, defined as “the world of everyday experience in which the phenomenal world presents itself to the senses of the individual, fully shaped and constituted by the beliefs and assumptions of his or her culture” (pp. 72-73). He points to advertising and the fashion system as two instruments for transferring meaning from the culturally constituted world into consumer goods. Individual consumers get meaning out of goods through a variety of rituals, including those associated with possession of a good and those associated with the process of exchange, which I will return to later.

Taste & Sensory Experience

“Taste is the difference between food as a mere sustenance and food as part of life’s rich pageant, a part of sociality, spirituality, aesthetics, and more. Taste unifies the myriad means humans have devised to make food so much more than what makes us able to move, to survive as a species” – Trubek (2008, p. 6)

Given the highly symbolic and communicative nature of consumer goods in general, and food in particular, it is not surprising that *taste* is a complex phenomenon

incapable of being explained by a given food item's nutritional composition or ingredient list. One obstacle to understanding taste is the fact that it has several semantic meanings related to food. In its most simple and undisputed form, taste refers to the bodily sense responsible for perceiving the five basic tastes – sweet, sour, bitter, salty and umami – of food and drink substances (Merriam-Webster). *Tasting* occurs when these food and drink substances dissolve in the mouth and are detected by specialized receptors (i.e., taste buds) on the tongue; these taste receptors then send signals to the brain where, combined with signals from the sensory apparatuses of smell and touch, a particular flavor is perceived. In practice, this meaning of taste is often used as a synonym for *sensory experience* and is dominant among sensory scientists and psychologists who are interested in the physiological processes by which an individual perceives food.

From that definition, taste is framed as an objective property of food. Yet, at the same time, “taste remains profoundly subjective because the taste experience can never be physiologically shared. Instead, taste evaluations must occur through language, through a shared dialogue with others” (Trubek, 2008, p. 7). This leads to a second meaning of taste, which refers to *discernment*, i.e., “critical judgment, discernment, or appreciation” (Merriam-Webster online dictionary, n.d.), or “the ability to discern what is of good quality” (Oxford online dictionary, n.d.). Referencing Immanuel Kant's 1790 philosophical work, *Critique of Judgment*, which posits that “judgments of taste” are based in an individual's subjective feelings, Shapin (2012) further describes the inherent complexity in discerning and communicating the sensory experience of food in practice:

On the one hand, taste is an internal, private, felt response – subjective in the sense that there is no way that I can feel just what you feel– and, on the other hand, taste is something we might be able to give reasons for, reasons which we

might communicate— objective in the sense that such reasons exist and that we can attach them to the object in question. (p. 175)

Instead of believing that it is possible to translate individuals' subjective experiences into "objective" conclusions about taste, Shapin argues that a more valid construct is *intersubjectivity*, which reflects a collaborative effort of "taste communities," which "coalesce around practices ... that refer to mutually accessible external properties as the causes of internal states" (p. 178). This relates back to Trubek's (2008) notion of a "shared dialogue" for discerning taste, and points to the need for a better understanding of "how this dialogue develops" and the various factors that shape "both the conversation and the final sensory evaluation" (pp. 7-8).

The third key meaning of taste as it relates to this research refers to *preference*, i.e., propensity or liking. Like discernment, preference is complex. While there are clear variations in preferences between individuals (i.e., personal tastes), we also see patterns at the group level (e.g., cultural tastes related to nationality, ethnicity, or religious affiliation). It is in these latter meanings of taste – *preference* and *discernment* – that the concept takes on an additional element of complexity because usage is not limited to discussions about food; someone might have a taste for classical music, for example, or "good taste" in fashion. As food activist and founder of Slow Food International, Carlo Petrini, eloquently explains the problem:

Precisely because the word 'taste' applies to many forms of culture, including art, fashion, and elegance, when used in gastronomy it also absorbs a thousand nuances that can't be chewed and swallowed, and is charged with values that often have little to do with flavor. (2001, p. 70)

This interdisciplinary multi-functionality may help explain why, in disciplines outside the realm of sensory science and psychology, “taste is defined chiefly in relationship to status; the sensory element is generally neglected” (Trubek, 2008, p. 15).

This research project examines how all three meanings of taste—sensory experience, discernment, and preference—interact. Yet, the relationships between the various meanings of taste are neither straightforward nor well-understood, and there is currently no consensus as to precisely what factors drive taste. While taste as sensory experience has traditionally been the domain of sensory scientists and psychologists, different disciplines have taken interest in preference and discernment and what factors influence it, with the domains of sensory science and psychology focusing on internal factors (i.e., taste, *nature*), and the domains of the social sciences focusing on external factors (i.e., context, *culture*). It is now clear that such a nature/culture binary fails to adequately capture the complexity of taste as an everyday practice and skill. Before offering an attempt to bridge the two perspectives, I will first highlight the relevant contributions of social scientists to the building of our current understanding of taste.

The bulk of early research on taste in the social sciences focused on understanding preference through patterns of consumption within particular cultures. Most famously, in his foundational treatise, *Distinction*, Pierre Bourdieu (1979/2013) illuminated the power of social class in shaping food preferences in France. In particular, he found distinct eating patterns associated with gender, labor, the body, and health—all things, he argues, that are learned from within one’s social class. He concluded: “It is clear that tastes in food cannot be considered in complete independence of the other dimensions of relationship to the world, to others and to one’s own body, through which

the practical philosophy of each class is enacted” (p. 36). A limitation of using consumption patterns as a proxy for preference is that it assumes people prefer the foods they regularly consume; however, people can only “prefer” what they know and have access to—both what is physically available and what they can afford.

Richard Wilk (1999/2013) elaborated on the relationship between social class, access, and power with regard to food preferences in his longitudinal comparative study of consumption patterns in colonial and post-colonial Belize. Similar to Bourdieu, he initially observed a “colonial hierarchy of taste,” such that lower classes were constrained in their food choices by those of higher status, who controlled access to expensive food imports: “Elite power was embodied in practices of consumption, and through roles as cultural gatekeepers, the elite were arbiters of taste in everything” (p. 386). In the post-colonial period, however, these stratified consumption patterns shifted markedly. Wilk attributed the change to the rise in international press, media, and travel that accompanied national independence, which provided the middle and working classes with alternative sources of consumer goods, information, and taste. With this new experience and knowledge of the world, Belizean food tastes underwent a period of transformation, rediscovery, and reinvention that led to the establishment of, and preference for, an “authentic” national cuisine based largely on local foods. These findings suggest that the relationship between social class and taste is mediated by access to information and goods. They also support the view of consumption as “a system for the exchange and control of information,” put forth by Douglas and Isherwood (1978, p. 115).

While the work of Wilk and Bourdieu was influential in demonstrating how tastes in food are simultaneously products, markers, and producers of culture, sociologist of

science Steven Shapin (2011) critiques the tendency of social scientists to engage more with the “functions rather than the formation of taste” (p. 179), arguing that we still know very little about how taste judgments develop and how they come to be shared:

The sociological treatment of taste has centered overwhelmingly on the social uses of taste, on taste as a social marker, as a mode of distinction, on explanations of changing tastes, on fashion as a social phenomenon. These are all worthy topics, but they are not the same thing as a focused engagement with making and communicating taste. (p. 177)

In a similar vein, Hennion (2007) rejects the notion of “social determinants”—like class—acting as “blind forces that grip you and of which you are ignorant” (p. 102). He instead proposes a more conscious and active role of the individual: “It is tasters that produce, reinforce and elaborate what determines them, and not the abstract determinisms produced by sociologists or cognitive scientists, who would underhandedly regulate a taste that ignores the taster” (p. 102). Rather than being ignorant, or trying to deny or escape social determinants, Hennion argues, tasters use them in combination with other factors—e.g., “following the taste of others, searching for one’s own preferences, focusing on the quality of things and the training to perceive what is considered to be the best” (p. 111)—in order to “‘determine’ their own tastes” (p. 103).

The inadequacy of a nature/culture binary for explaining and understanding taste is increasingly being recognized by food systems scholars and activists. For instance, Trubek (2008) writes, “[o]ur cultural tastes frame our physiological taste experiences” (p. 7), and Petrini (2001) suggests: “Our pleasure is shaped in certain ways by different factors, cultural and sensory, and differences in the societal context and personal history of every person” (p. 70). Likewise, Hennion (2007) rejects the nature-culture duality and suggests a more integrated, skillful, and social process of taste formation:

With taste and pleasure, the effects are not exogenous variables, or automatic attributes of objects. They are the results of a corporeal practice, collective and instrumented, settled by methods that are discussed endlessly, oriented around the appropriate seizing upon of uncertain effects. (p. 108)

Thus, he advocates a sociological approach to taste formation that is founded on three main points: (1) taste is not an attribute or a property, it is an *activity*; (2) taste is co-produced by the individual taster and the object being tasted; and (3) taste is social rather than individual. The view that the taste experience is formed through an individual's interactions with objects, as well as other people, revises the commonly-held notion that tasting is an isolated, unidirectional, independent activity. To the contrary, during the act of tasting individuals have access to a host of "objects and tools, devices, frames ... at once instruments and the traces, ceaselessly mobilized, of the presence of others" (p. 109). In this way, taste is "lived by each but fashioned by all" (p. 103), or, as Shapin (2012) puts it: "Our taste is the taste of others" (p. 176).

In sum, taste is perhaps best described by Trubek (2008) as an "unbelievably vital, complex, amorphous, physiological, cultural, undoubtedly elusive, and probably evasive notion" (p. 8). And yet, as Shapin observes, discussions surrounding taste and preferences – whether for food, art, or fashion – are central to "the fabric of our quotidian social life" (p. 176). Consequently, he argues, "[s]o far as the practices of everyday life are concerned ... we should get better at understanding judgment and how it happens" (p. 176). As a first step, he points to the need for "ethnographies – contemporary and historical – of how taste judgments come to be formed, discussed, and sometimes shared" (p. 177). This study contributes one such ethnography by examining how sensory preference for Vermont artisan cheese is shaped in practice by cheesemongers.

Taste & Globalization

As the world changes, more and more local systems—of food, and of all else—are pulled into more extensive webs of interdependence. What remains the same is how people are moved to push back against these pressures, in their desire to protect one or another feature of the local ...[T]his questioning spirit challenges wider forces, slowing the momentum toward uniformity and standardization – Mintz (2009, p. 215)

Despite its focus on social determinisms, Wilk's research on the evolution of food preferences in Belize is significant in large part because it demonstrates how understanding taste becomes more complex with the phenomenon of globalization. Globalization is characterized by an increased flow of people and resources—both material (food and other consumer goods) and immaterial (information)—across geographic borders, which inevitably leads to a more interconnected and interdependent world. Contemporary scholars recognize the “importance of globalization to our everyday cultural beliefs and practices” (Trubek, 2008, p. 14), and it is widely regarded as precipitating major changes in the structure and function of the modern food system (see Hendrickson, Wilkinson, Heffernan & Gronski, 2008 for a detailed report on the global agri-food system). One important consequence is a continually expanding variety of foods that are known and available for purchase, owing to global systems of distribution that eliminate traditional spatial and temporal constraints like climate and season.

While this influx of new foods, flavors, and knowledge can help communities to distinguish local foods and cuisines as authentic (see Pilcher, 2006/2013), a growing movement of food system actors is concerned that the concurrent phenomena of globalization, industrialization, and standardization, along with mass consolidation and centralization, pose a threat to the authenticity and distinction of traditional foods and

food preferences around the world. In particular, proponents of the Slow Food International movement perceive the trend of mass-produced, standardized, “fast” food as leading towards a “homogenization of taste” (Leitch, 2003, p. 454). In response to this threat, Slow Food International has made its mission to preserve and promote traditional foods and regional cuisines. They do this by not only creating networks of small-scale artisan food producers around the world, but also by “educating” consumers about taste (Leitch, 2009/2013). Much of Slow Food discourse centers on adopting a “slower” way of living and eating that allows one to experience sensual pleasure from food and develop taste. Indeed, Petrini (2001) writes: “To train the senses, refine perception, restore atrophied dimensions of sensory experience—these are the objectives of Slow Food” (p. 69). In the next section I describe another contemporary effort to, paraphrasing Mintz (2009, p. 215), slow the momentum toward uniformity and protect the local through taste.

Taste of Place

As evidenced by the rising popularity of locally-based alternative food movements, an important part of the dialogue surrounding a renewed interest in taste is the notion of *place*. Indeed, cultural anthropologist Amy Trubek (2008) suggests that “placing or localizing food is our bulwark against the incredible (and increasingly menacing) unknowns of our interdependent global food system” (p. 12) and notes that taste is increasingly being located by both producers and consumers. In her book, The Taste of Place: A Cultural Journey into Terroir, Trubek (2008) demonstrates how the French concept of *terroir* provides a framework for thinking about and better understanding the relationship between food, taste, and place.

Terroir, which has no English language equivalent but roughly translates as “location” or “soil,” conveys how physical landscapes and other environmental factors become expressed in physiological taste (i.e., the sensory experience of food and drink). Oxford Dictionaries defines *terroir* as “the complete natural environment in which a particular wine is produced, including factors such as the soil, topography, and climate,” and *goût du terroir* as “the characteristic taste and flavor imparted to a wine by the environment in which it is produced.” While wine is the archetype, Mintz (2009) notes:

In recent years, food marketers, smelling the potentialities of locality in the vintner’s references to *terroir*, have been applying the idea to other products. Though there is a good deal of ‘hype’ involved, the case for taste variation by locality in whiskeys, cheeses, chocolates, teas and coffees seems well founded. (p. 211)

Much more than a marketing strategy, *terroir* is being adopted and adapted by various food system actors, including producers, academics, and agri-food activists, and extended to a range of food items to express a spectrum of nonmonetary values related to place.

While the traditional definition of *terroir* is built on notions of the natural environment, a more contemporary view frames it in terms of both nature and culture. According to Trubek, *terroir* is the connection between the taste of a food product and its “origins,” where origins could include such things as “the region where the wine was made, the method used for pressing the olive oil, the style of the cheese maker” (p. 3). More than just natural landscapes, then, Trubek’s conception of *terroir* reflects Hinrichs’ (1996) *landscape concept*, which “carries within it the tensions between object and subject, matter and culture, the individual and the social,” and “embraces at once the concrete materiality of the land, the social relations undergirding different land uses, and the ideological content implicit in particular images of human-land interaction, including

specific rural production practices” (pp. 261-262). Another useful theoretical construct for thinking about the people and practices in a locality is Ingold’s (1993) concept of the *taskscape*. Ingold defines ‘task’ as “any practical operation, carried out by a skilled agent in an environment, as part of his or her normal business of life” (p. 158), and refers to the “experience of those who, in their activities, carry forward the process of social life” (p. 157). Taken together, the “place” in Trubek’s “taste of place” encompasses a holistic sense of place that brings together the realms of nature, social relations, and meaning—what geographer Robert Sack (1988) refers to as *place as context*.

While *terroir* is grounded in French history and culture, Trubek (2008) argues that the concept is universal, and that links between taste and place can be observed in food values and practices around the globe. In the U.S., for instance, Trubek describes how environmental factors, such as geological characteristics of the land, are being explored for their potential to affect the sensory quality of maple syrups produced in the state of Vermont. Artisan cheese—another one of Vermont’s distinctive specialty food products—also fits particularly well into discussions of *terroir*, given that animals’ diets, seasonality, and microorganisms are all well-recognized sources of variation in flavor (Kindstedt, 2005). In addition to these environmental factors, Paxson (2006) identifies a strong socio-moral component of *terroir* that connects producers and consumers of American artisan cheeses. She posits: “The values that make artisan cheeses taste ‘good’ are related to those values that make such cheese ‘good’ to make” (p. 203).

In particular, Paxson (2010) argues that artisan cheesemakers in Vermont and around the U.S. are “reverse engineering” *terroir*, by drawing on social values such as

environmental stewardship, animal welfare, and revitalization of rural communities to *create* place:

By calling attention to material conditions of production, U.S. experiments with *terroir* offer opportunity for reterritorialization—for drawing meaningful lines of connection among people, culture, and landscape to invest rural places anew with affective significance and material relevance. (p. 446)

This aligns with Trubek’s observation that, in contemporary practices of *terroir*, values concerning “food practices, food tastes, and food origins” are being used to create “alternative cultural values about place, about community, [and] about agriculture...” (p. xiv). Thus, whereas European food producers conceive *terroir* as intimately connected to and dependent on a nostalgic past—e.g., centuries-old agrarian landscapes, multi-generational food production, and strong regional food traditions—artisan producers in the United States, with relatively new natural landscapes and weakly-established food traditions, view it as part of an idealistic future (Paxson, 2010).

The significance of *terroir* to the sensory experience of food and drink is becoming widely accepted among food systems scholars. For instance, Marsden, Banks, and Bristow (2000) underscore the link between production context and sensory quality:

Specific characteristics of the place of production (natural conditions, cultural and gastronomic traditions, etc.) or the production process (artisanal, traditional, farm based, etc.) are critical parameters to define the quality of the product, and in many cases are claimed to result in distinctive (typical) tastes or appearances. (p. 401)

Moreover, consumers around the world are increasingly becoming more discerning when it comes to the sensory quality of their food and drink (Aylward, 2008; Trubek, 2008); they no longer want “a mass produced product that lacks *terroir*, character, or distinction in taste” (Aylward, 2008, p. 377). Consequently, there is a need for producers of food and

drink to “articulate the pursuit of individual stories, a sense of place, and authentic practices, as well as the human and natural elements of *terroir*” (Aylward, 2008, p. 379).

When it comes to communicating *terroir* to consumers, however, a tension can arise when producers’ sociocultural values co-exist with their need to be economically viable. For example, Paxson (2013) discusses the “tension of artisanship in its dual capacity as commercial business and personal vocation” (p. 64) and cheesemakers “striving daily to reconcile principle and pragmatism” (p. 65). Moreover, she highlights the paradoxical nature of effectively communicating one’s values to consumers: “Success in craft production entails, in part, the successful selling of sentiment: images of the bucolic family farm help sell high-end cheeses. Success thus runs the risk of ‘selling out’ one’s values—ecological, anti-corporate, ‘little guy’” (p. 214).

In addition to this tension felt by producers, for consumers who desire food that is naturally and culturally embedded it can be hard to distinguish between values-based *terroir* and profit-driven marketing. For instance, Paxson (2006) analyzes how sensory and place-based language in the website materials of one Vermont cheesemaker interact to express *terroir* and entice the consumer: “Not only are we tantalized by the epicurean experience of a slice of Vermont Shepherd, we are invited to imagine the flavors distinctive to this cheese emerging from equally distinctive clover-filled pastures, locating the cheese, and its makers, in the pastoral landscape of Vermont” (p. 201). While acknowledging that “it might be easy to dismiss this synesthetic appeal as a mere marketing tool, selling the consumer, at over \$20 a pound, a value-added fantasy of clean rural living” (p. 201), she suggests that in doing so, we fail to recognize taste as capable of being shaped by extrinsic attributes, and food as capable of containing nonmonetary

values. These challenges associated with communicating intangible social values are illuminated by a closer examination of commodities and processes of exchange.

Commodities & Exchange

“In a commercialized, monetized, and highly commoditized society, the value-homogenizing drive of the exchange system has an enormous momentum, producing results that both culture and individual cognition often oppose” – Kopytoff (1986, pp. 76-77)

Similar to the way Douglas & Isherwood (1978) and McCracken (1988) defend an anthropological view of consumption and consumer goods, Appadurai (1986) and Kopytoff (1986) seek to illuminate the cultural and social dynamics of commodities and commodity flow. While Appadurai defines a commodity broadly as “any thing intended for exchange,” (p. 9) Kopytoff provides the “commonsensical” economic definition: “an item with use value that also has exchange value” (p. 64). Importantly, Kopytoff challenges the widely-held notion that exchange is equivalent to price and that commodities are only of monetary value: “[E]ven things that unambiguously carry an exchange value—formally speaking, therefore, commodities—do absorb the other kind of worth, one that is nonmonetary and goes beyond exchange worth” (83).

The ability of commodities to carry and signify noneconomic values is related to its degree of social and cultural embeddedness. Whereas the process of commoditization functions to homogenize value, culture provides a counterforce. According to Kopytoff, commodities must be “culturally marked” as certain kinds of things; however, only some things are considered appropriate for marking, and different commodities mean different things at different times to different people. He writes: “Such shifts and differences in

whether and when a thing is a commodity reveal a moral economy that stands behind the objective economy of visible transactions” (p. 64).

The concept of a moral economy has increasingly been taken up by food systems scholars as a way to acknowledge the co-existence of economic and noneconomic—cultural, social, moral—values held by food system actors. For instance, in her analysis of Slow Food’s evolution, Leitch (2009/2013) identifies the movement’s success as deriving from its ability to “reframe debates about food as a commodity ... to debates about taste as cultural heritage” (p. 420), thereby making food about “moral economies, not just economics” (p. 423). Paxson (2006) argues more broadly that “all foods produced for market, ‘capitalist’ and ‘noncapitalist,’ are embedded in cultural and moral economies” (p. 202) that link production and consumption.

The concept of a cultural economy has also been used widely to frame research on a variety of regional or national food and drink products, including maple syrup made in Vermont and Quebec (Hinrichs, 2008), wine in Australia (Aylward, 2008), and American artisan and farmstead cheeses (Paxson, 2013). In all of these cases, the producers are driven by a complex and diverse set of goals and values. For instance, in her interviews with Vermont and Quebec maple syrup producers, Hinrichs (2008) discovered that “[m]arket exchange value was not the paramount concern” (p. 516); rather, maple sugaring served important social and cultural functions.

Aylward (2008) frames his work on the Australian wine industry using a “‘whole systems’ cultural economy context,” in which the various activities and values underlying the production, distribution, and marketing of a food or drink product are interdependent:

This concept ... provides an understanding of the cultural/economic fabric that weaves such values as aesthetic, historical, social and symbolic with production, distribution costs, price-points, and market value. Necessarily, therefore, the concept includes both tangible and intangible patterns based upon the end product itself (tangible), and the customs, approach, heritage, and symbols (intangibles) that attach themselves to the product on its journey from conception to consumption. (pp. 380-381)

Thus, he conceptualizes a cultural economy as an “enriched fabric” that weaves “individual and community values, passion, care, identity, and *terroir* together with the more tangible aspects of production, distribution, price-points and marketing” (p. 373), and that recognizes and communicates cultural markers, such as “collective and individual belief systems, a product’s anthropological value, or the sense of place and purpose that becomes inherently bound within that product’s development” (p. 380).

Paxson (2006, 2013) also locates moral and cultural economies—what she calls *economies of sentiment*—in the production of American artisan and farmstead cheeses. Based on ethnographic research with cheesemakers, she demonstrates “how the economy of farmstead cheesemaking is guided by a mix of qualitative and quantitative values, of moral sentiment and business sense” (2013, p. 65). Thus, economies of sentiment “point to the cultural, emotional, ethical, and political dispositions that motivate people, in this case, to assume the economic risk and backbreaking labor of making cheese in small batches using limited technology” (p. 66). Paxson argues that these cheesemakers are driven by a wide range of sentiments; some value the “ecological sustainability of farmland and the well-being of farm animals, while others derive primary satisfaction and pride from the tactile job of transforming milk into cheese” (p. 65). These diverse sentiments that go into the production of artisan cheese make its exchange more complex:

Heterogeneity in what making cheese means to those who make it underscores one way in which artisan cheese is an unfinished commodity: because artisanal cheese is ripe with possibility for realizing numerous values and sentiments ... it remains to be seen which values 'artisanal cheese' comes to represent on the market. (p. 64)

Paxson adopts the term *unfinished commodity* to describe how artisan cheese “has not (yet?) been reduced to an apparent equivalence between intrinsic value and market value” (2013, p. 13). From a sensory standpoint, artisan cheese is “unfinished” due to its unique intrinsic qualities of “aliveness,” variability in taste, and lack of uniformity. However, it also stems from its distinctive extrinsic qualities related to place. Indeed, Aylward (2008) suggests the importance of a cultural economy framework for distinctive food products like artisan cheese: “The intangible fabric of meaning, romance, heritage, and symbolic value can represent the cultural dimension of a product unique in its locality, its production methods, and its place among consumers” (p. 382).

In addition to a cultural dimension, the fact that commodities require the process of exchange indicates a social dimension, since exchange is inherently a social activity. Two broad categories of exchange exist: *market* and *non-market*, which includes *reciprocal* and *gift exchange*. According to the economic historian Avner Offer (1997), market exchange and reciprocal exchange are suited for different situations:

Prices facilitate exchange when information is scarce and coordination difficult, when goods are standardized and cheap ... Conversely, reciprocal exchange has been preferred when trade involves a personal interaction, and when goods or services are unique, expensive, or have many dimensions of quality. (p. 450)

The key difference between market and non-market exchange, according to Offer, is a personal interaction. While market exchange is seen as solely an economic transaction, in gift exchange “something else is acquired, over and above the material gains from trade.

Exchange is not only an economic transaction, it is also a good in itself, a ‘process benefit’, usually in the form of a personal relationship” (p. 451). Offer adopts the term *regard* to encompass the various dimensions of personal relationships, including attention, acceptance, respect, reputation, status, power, love, friendship, kinship, and sociability (p. 451).

Offer’s *economy of regard* is built on the idea that preference for non-market exchange arises from the “intrinsic benefits of social and personal interaction” (p. 450). While he acknowledges that regard can influence consumer preferences in a market setting—through such things as personal obligation and loyalty—he remarks that the “[t]he mix of regard and of salesmanship is uneasy” (p. 467) and that “real regard is typically not for sale” (p. 454). Thus, although it is possible in market exchange to find fulfilment in genuine exchanges of regard, “because money is involved, authenticity is suspect—it is *pseudo regard*” (p. 467). In particular, he writes about the obstacles to genuine regard in the customer-retailer relationship: “In business, the vendor’s regard for *customers* is often perceived as inauthentic, as a *pseudo-regard*. The customers have reason to suspect it doesn’t matter *who* they are” (p. 454, emphasis in original).

Whereas Offer problematizes market exchange, Lee (2000) suggests that genuine regard is still possible through the “mutual sharing and extension of knowledge” (p. 140). Thus, regard in market transactions involves a simultaneous exchange of commodities and knowledge between the buyer and seller. Lee writes: “What is being traded across such markets is an enjoyment and fulfillment in the transmission and extension of knowledge as well as in the products to which the knowledge is attached” (p. 140). This suggests the importance of understanding how knowledge is communicated.

Kopytoff (1986) differentiates between two kinds of knowledge with regard to commodities: *production knowledge*, which is the knowledge—technical, social, aesthetic—that goes into the production of the commodity, and *consumption knowledge*, which is the knowledge that goes into “appropriately consuming the commodity” (p. 41). He notes that the production knowledge for primary (i.e., bulk) commodities is more likely to be standardized than that for secondary (i.e., luxury) commodities—like artisan cheese—where “taste, judgment, and individual experience are likely to create sharp variations in production knowledge” (p. 42).

When there are discontinuities in knowledge between producers and consumers, problems related to authenticity and expertise can arise. Appadurai observes: “The gaps in knowledge and the difficulties of communication between producer and consumer are not really obstacles to the vigorous flow of bulk commodities intended for multiple industrial transformations before they reach the consumer” (p. 43). For more specialized, non-bulk commodities, on the other hand, more direct forms of communication are needed for both “the satisfactory negotiation of price and the matching of consumer taste to producer skill, knowledge, and tradition” (pp. 43-44). Notably, he speaks of the importance of *merchant bridges* to describe how those who sell commodities can bridge these gaps in knowledge between producers and consumers. Moreover, he notes that: “Problems involving knowledge, information, and ignorance are not restricted to the production and consumption poles of the careers of commodities, but characterize the process of circulation and exchange itself” (43).

If we think of commodities as representing complex distributions of knowledge, as Appadurai (1986) suggests, then “it becomes useful to look at the distribution of

knowledge at various points in their careers” (p. 41). This research project looks at the distribution of knowledge of a particular commodity (Vermont artisan cheese) at a particular point in its “career” (retail). As I demonstrate below, evidence from marketing studies with artisan cheese consumers, and ethnographies of producers and retailers, suggests that narratives are a primary mechanism for the distribution of knowledge from producers to consumers, and that cheesemongers act as a merchant bridge by communicating both production and consumption knowledge to consumers.

Cheese Narratives

Reed and Bruhn (2003) conducted focus groups with consumers to better understand what drives sales of specialty cheese in California. One major finding was that effective narratives about products influence purchases, or more bluntly: “Narrative descriptions sell” (p. 79). In particular, consumers said they valued narrative descriptions about *where* the cheese came from and *how* the cheese was made. The authors found that consumers have “a romantic vision of cheese production,” which included rolling green hills, small scale, and traditional methods (p. 79). They conclude:

This love of narrative is a marketing opportunity not to be missed by farmstead cheese makers. Stories about the cheese makers and their farms should be conveyed to the customer. Retail shops can use feature boards or descriptive case cards, or the store staff can relate the narratives directly to customers. (p. 79)

Thus, they highlight the importance of retailers in distributing specialized knowledge to consumers: “Members of the sales staff need to know as much as possible about the cheese, who the cheese makers are and what the farm is like, including farming practices and animal care and feeding” (p. 80). This aligns with Appadurai’s (1988) concept of *merchant bridges*, acting between producers and consumers when there are gaps in

knowledge (p. 42). Indeed, Reed and Bruhn suggest that “[s]tore staff members can have a significant impact on sales, both through a high level of service and a broad knowledge of their products” (p. 78). In the words of one focus group participant: “[I]t has everything to do with the person selling me the cheese” (p. 79). The importance of retailers also emerged in focus groups with regional and largely urban consumers of Vermont artisan cheese (Lahne & Trubek, 2013).

Cheesemongers. Despite playing a critical role for artisan cheese consumers, little is known about cheesemongers and their expertise. In the growing body of research on artisan cheese, only one study has focused explicitly on retailers. Roberts, McKenzie, and Micken (2008) utilized participant observation and interviews at several specialty cheese shops in the northeastern U.S. They adopt the term *cicerone*, meaning guide or mentor, to describe how cheesemongers transmit specialized knowledge in a variety of ways, from store décor and lay-out and selection of cheeses, to interacting with the customer. With regard to the latter, rituals such as cheese tasting and cheese cutting epitomize the individualized service and personalized experience of the cheesemonger-consumer interaction, while the telling of “cheese narratives” is a more literal transference of their specialized knowledge. The authors conclude that: “The cheese retailer, and more particularly, the highly knowledgeable cheesemonger, holds the key to the mystique and the value of these artisan cheeses in the eyes and the wallets of the consumers” (p. 306).

The rituals that accompany buying artisan cheese in a traditional, specialized cheese shop bear resemblance to McCracken’s (1988) discussion of moving meaning from consumer goods to consumers through the ritual of gift exchange. Although gift

giving is typically a non-monetary form of exchange, in both cases the physical movement of goods “is potentially also a movement of meaningful properties” (p. 84). According to McCracken: “The ritual of gift exchange establishes a potent means of interpersonal influence. It allows individuals to insinuate certain symbolic properties into the lives of a gift recipient. It allows them to initiate the possibility of meaning transfer” (p. 84). In a similar vein, Offer (1997) says the exchange of gifts differs from non-gifts because gifts are personalized:

Even when obtained from the market, it provides evidence of an effort to gratify a particular individual. It conveys a signal that is unique to giver, receiver, or both. The personalization of gifts, with its evidence of caring, serves the function of authenticating the regard signal. (p. 454)

Given the highly personal and individualized interaction between cheese retailers and customers, and the fact that artisan cheese is embedded in a cultural economy, it may be that a similar ability to insinuate symbolic properties and initiate meaning transfer exists for cheesemongers. Moreover, a parallel can be seen between the specialty cheese ritual of cutting-to-order and wrapping in traditional “cheese paper” (Roberts et al., 2008) and the observation of McCracken that “[a]ttention must also be given to the significance of the wrapping and presentation ... [which] are vitally important to the meaningful property of the goods exchanged” (p. 85).

In addition to playing a vital role for artisan cheese consumers, cheese retailers are important from the standpoint of producers. Cheesemongers are unique from other food retailers due to artisan cheese’s status as an “unfinished commodity,” marked by its aliveness, variability, and undetermined value (Paxson, 2012). Paxson found that this element of variability, and consequent risk, leads artisan cheesemakers to seek strong,

trusting relationships with their retailers. For example, “producers can instruct retailers to expect product variation owing to seasonal production,” and in the extreme case where a cheese must be recalled, “having a personal relationship with one’s retailers can be essential for business survival” (p. 59).

Moreover, consistent with the “cheese narratives” described by Reed and Bruhn (2003) and Roberts et al. (2008), the function of the cheese retail professional as a storyteller also emerges from the producer perspective offered by Paxson (2013). She notes that, while producers can disseminate “cheese stories” via unique names and descriptive labels, they are more effective via face-to-face interactions at the time of sale. Thus, at retail venues where the producer is not present, the cheesemonger acts as a surrogate by communicating this unique cheese story to consumers. As with the earlier discussion of *terroir*, Paxson points out that: “Telling the story does not just sell the cheese; it conveys a sense of what values the producer brings to a cheese’s production” (p. 59). More than a marketing tool, then, cheese stories allow producers to communicate to consumers about their social values and practices. They are a vehicle for specialized social information intimately related to place. In the case of Vermont artisan cheese, this is a place of distinct and desirable rurality (Hinrichs, 1996).

Vermont. According to Hinrichs (1996), the name ‘Vermont’ suggests a “rural place that is good, clean, picturesque, and natural” (p. 272). This rurality, she argues, is an object for consumption that “rests on both material instances and symbolic understandings of landscape, tradition, and place” (p. 261). In particular, an idealized rural landscape is thought to include land uses and production practices “characterized by technological moderation, calm industriousness, and social harmony” (p. 262). Moreover,

Hinrichs cites previous research that found consumers “associated the name ‘Vermont’ with ‘purity, wholesomeness, rural values, tradition, self-reliance ... hard work, environmental awareness and closeness to nature’” (p. 269). More than just being a strong symbol of typical rural values, however, Hinrichs suggests that the name ‘Vermont’ confers a “specificity of place,” such that its unique rurality is viewed as “especially distinctive and worth experience by the tourist or consumer” (p. 258).

To better understand how and why this is true, Hinrichs (1996) examined the historical and contemporary production and dissemination of images and narratives of rural Vermont by both the state government officials and producers of a wide range of goods and services. Whereas, historically, predominant ideas about Vermont focused on bringing people *to* Vermont—e.g., building a vibrant tourist economy—they are now used primarily to “distinguish and market the goods and services that happen to be produced in Vermont” (p. 268) but that are largely consumed out-of-state. She concludes:

With the image and narrative of Vermont as a distinctive rural place compressed and packaged in the name itself, the consumption of Vermont products and services becomes a way of buying fully certified, highly desirable rurality. Furthermore, one need not necessarily visit Vermont or move to Vermont to reap the benefits or participate in the rural experience. (p. 269)

In this way, products began to be “marketed not so much for what they are, but for where they come from” (p. 271).

Hinrichs notes that this kind of “symbolic marketing” of Vermont, which has “clear value-adding potential,” has been key for specialty food products—especially specialty dairy products: “In the last twenty years, the state’s orientation to agriculture has, if anything, become more market-driven and more linked to symbolic promotion of ‘Vermont as a rural place’” (p. 269). This is clearly still the case, as evidenced by the

legislature's 2012 passing of Act 142, "An act relating to preserving Vermont's working landscape," of which the first chapter is entitled "Promotion and Marketing of Vermont Foods and Products" (H.496, Sec. 1. 6 V.S.A., chapter 207). Similarly, the notion of a "Vermont brand" comes up frequently in the materials and discourse surrounding Vermont's current Farm to Plate Initiative.

Taken together, the work by Hinrichs, Paxson, and Roberts et al. suggests that the unique material, natural, social, and symbolic circumstances of Vermont artisan cheese production are transmitted to consumers by cheesemongers through the telling of "cheese stories," which are important to sensory experience and help to build sensory preference. Trubek (2008) points out that while we have access to a lot of information relating to food in general, this type of contextual knowledge tends to be limited: "[A]lmost all of our knowledge is abstract, a series of received recommendations, guidelines, or sales pitches. Our everyday lived experience, meanwhile, does not include farming, or having conversations with farmers, or, for many, even ever seeing a farm" (p. 209). In these cases, where the consumer is removed from the producer, the production context, and has no previous experience to draw from, he or she must rely on other sources for the specialized, concrete information about a food product's origins. Thus, outside of ultra-localized food systems, where producers retain the potential to serve this role at direct-to-consumer retail venues like farmers' markets, cheesemongers participate in alternative mechanisms for the circulation, exchange, and distribution of knowledge and food.

Alternative Food Networks & Short Food Supply Chains

As evidenced by the discussions above, I am drawing on a broad framework that views the production, consumption, and exchange of Vermont artisan cheese as deeply

embedded in complex networks of social relations and place-based values. Conceptually, these networks resemble *alternative food networks* (AFNs), which have been the topic of much recent research in food systems. Renting, Marsden, and Banks (2003) define AFNs as “emerging networks of producers, consumers, and other actors that embody alternatives to the more standardized industrial mode of food supply” (p. 394). Examples include market structures involving a direct link between producers and consumers, such as farmers’ markets, community supported agriculture, and farm-to-school programs. Importantly, in addition to providing more direct markets for farmers, Jarosz (2008) highlights the ability of AFNs to “express social and environmental values about how and where food is grown, distributed and eaten and the social relations that underpin these cultural and economic practices” (p. 234).

To date several studies have contributed to an understanding of the theory and practice of AFNs. Sage (2001) adopted Lee’s concept of a “geography of regard” to examine “networks of producers, consumers, and other actors bound by mutual interests, shared values and territorially demarcated cultural identities” in a southwest region of Ireland (p. 4). Renting et al. (2003) examined a form of AFN, “new food supply chains,” highlighting how they create more direct linkages between “agriculture and society, producers and consumers,” thereby bringing “consumers closer to the origins of their food” (p. 398). In particular, the authors draw a connection between knowledge of place and quality:

A key characteristic of new supply chains is their capacity to resocialise or respatialise food, thereby allowing the consumer to make new value judgments about the relative desirability of foods on the basis of their own knowledge, experience, or perceived imagery. Commonly, such foods are defined by either

the locality or even the specific farm where they are produced; and they serve to draw upon an image of the farm and/or region as a source of quality. (p. 398)

In a similar vein, Murdoch, Marsden, and Banks (2000) identify the recent “shift toward the production and consumption of quality” (p.108), and argue that “quality food production systems are being reembedded in local ecologies” (p. 108). Of particular relevance to the current study, Murdoch et al. (2000) found that organic artisan cheese produced in Wales is “deeply embedded in a local ecology of production,” and that, “when sold, carries many traces of this locale along with it” (p. 117).

In an effort to sidestep the various meanings and connotations of “quality” with regard to food, Sage (2003) adopts the term *good food*, defined by three key attributes: (1) the embodied organoleptic properties that give it distinction (e.g., taste, smell, texture); (2) its ecologically embedded character, “defined by its locality of origin ... and its methods of production”; and (3) its socially embedded features, established by its “scale of production and by its generally localized distribution through short food supply chains” (p. 50). While one could critique his last point as conflating social and spatial relations (Hinrichs, 2000), this definition is noteworthy because it recognizes the contribution of both sensory and social factors in what makes a food item “good.”

However, it is not enough for a food item to simply have ecologically and socially embedded features, or other quality attributes. In the words of Marsden, Banks, and Bristow (2000): “Uniqueness and distinctiveness at the place of production needs to be matched and articulated forward through to the point of consumption” (p. 436). Both Sage (2003) and Marsden et al. (2000) argue that this occurs through a special type of AFN known as *short food supply chains* (SFSCs).

According to Marsden et al. (2000), three kinds of SFSCs exist. First, *face to face*, where products are sold directly from producers to consumers (e.g., at a farmers' market). Second, *spatial proximity*, where products are retailed within the specific region/place of production and consumers are made aware of the 'local' nature of the product at the point of retail. Notably, Sage (2003) amends this definition by suggesting that those at the point of retail are often "people who are accorded an expertise or regard for their association with the product, and may be further legitimized by acting as mediators for the producers themselves" (p. 49). Finally, *spatially extended* supply chains, where value and meaning-laden information about the place of production is transmitted to consumers who are outside the region of production and may have no personal experience of that region.

The overarching feature of all three types of SFSCs is that consumers receive products embedded with the information necessary to "confidently make connections and associations with the place/space of production *and, potentially, the values of the people involved and the production methods employed*" (Marsden et al., 2000, p. 425, emphasis in original). This is in line with Paxson's notion of cheese stories allowing consumers to understand not only the physical context of production but also the culinary and moral values of producers. As with the cheese story, this value-laden information can be printed on packaging or communicated personally at the point of sale. Finally, "[t]he successful translation of this information allows products to be differentiated from more anonymous commodities and potentially to command a premium price if the encoded or embedded information provided to consumers is considered valuable" (p. 425).

Critically, the word "short" in SFSC does not necessarily indicate geographic distance between producers and consumers, but instead refers to a shortened social

distance, such that relationships in the supply chain are built on transparency, quality, and shared values. Renting et al. (2003) explain:

SFSCs on the one hand ‘short-circuit’ the long, anonymous supply chains characteristic of the industrial mode of food production. On the other hand, producer-consumer relations are ‘shortened’ and redefined by giving clear signals on the provenance and quality attributes of food and by constructing transparent chains in which products reach the consumer with a significant degree of value-laden information. (p. 398)

They further emphasize that it is “not the distance over which a product is transported that is critical, but the fact that it is embedded with value-laden information when it reaches the consumer” (p. 400). As such, in contrast to conventional supply chains, SFSCs “rely much more heavily upon constructing new synergies between proximate relationships, associations, and ecological and regional food identities” (p. 408). They also focus on the *relationships* between actors involved in production, processing, distribution, and consumption (p. 394). Indeed, Renting et al. argue: “[I]t is important to go beyond a simple description of product flows and focus our analysis on the type of relationship between producers and consumers in these supply chains, and the role of this relationship in constructing value and meaning” (p. 399).

As this last quotation illustrates, while most of the emphasis on SFSCs is placed on producers and consumers, it is clear that retailers can play an important role in both the spatial proximity and spatially extended supply chains for Vermont artisan cheese. In the case of the former, retailers in Vermont can actively promote the cheese as a “local” product. We also know that cheesemongers have expertise and often act as mediators for producers (Paxson, 2013). In the case of the latter, it is possible that a consumer in New York City or Boston has never been to Vermont, or a dairy farm, and thus has no

personal experience of what makes the place of production unique. A question that emerges from these discussions of embeddedness, regard, and short food supply chains is the relationship between social and spatial values. Moreover, given that the current study adopts a regional approach, a discussion of scale as it relates to food is warranted.

Scale in Food Systems

The concept of geographic scale in food systems has received much attention in recent years, with the majority of the focus falling on the local-global dichotomy (Born & Purcell, 2006). In particular, there has been a tendency among researchers, activists, and local food system proponents to conflate the notion of a globalized food system with that of the dominant industrial food system, and extol localized alternative food systems as inherently “good, progressive and desirable” (Hinrichs, 2003, p. 33). Born and Purcell (2006) term this phenomenon the “Local Trap,” and argue that scale is socially constructed and, as such, cannot be inherently good or bad. Thus, they urge food systems researchers to be more precise and conscientious in their use of the concept.

In a similar vein, Hinrichs (2000, 2003) criticizes the tendency of food systems actors to conflate spatial and social relations. In particular, she argues that many of the positive attributes typically associated with “local” food systems—moral economies, social capital, vitality of independent artisan producers, small-scale production, relations of proximity, and regional palates—are more indicative of social values and relations than spatial location. For instance, she writes that “the social embeddedness of ‘local’ ensues from the possibility of face-to-face interactions and mutual knowledge” (p. 36)—in other words, relations of regard. Moreover, she points out that, “while affect, trust and regard can flourish under conditions of spatial proximity, this is not automatically or

necessarily the case,” and furthermore, that “specific social or environmental relations do not always map predictably and consistently onto the spatial relation” (2003, p. 36).

Just as geographically proximate food systems are not inherently sustainable—socially, environmentally, or economically—food systems that extend their geographic reach beyond a face-to-face SFSC does not automatically make them unsustainable. To the contrary, Hinrichs (2003) suggests that “local specialty agro-food production can play an important role in local place-based conservation efforts, precisely because it is nested in wider regional, national and international networks” (p. 36). To illustrate her point, she references Fairfax’s (2001) narrative case study of the Tomales Bay Food Company, an organization located in Marin County, California that makes and sells cheese using milk from local ranchers and whose stated goal is to “sell cheese at a price premium that gives the rancher sufficient return on milk to stay in business” (p. 624). In order to meet this goal of economic sustainability, Tomales Bay sells its cheese in regional and national markets, while at the same time marketing the notion of an “identifiable and cherished locality” by “investing a huge effort in educating purchasers to appreciate both (1) the connection between the land to their food, and (2) the purchaser’s own relationship with the farmers” (p. 624). This idea that a food can retain place-based values and identity even when sold and consumed out of the immediate region of production aligns with Trubek’s vision of “locally *based* food and drink from around the globe” (2008, p. 208, emphasis added), such that “the taste of place is rooted in geography, but it is not confined solely to a specific region” (p. 209). Clearly, the concept of geographic scale in the food system is more complex than a local versus global dichotomy.

Justification for a Regional Approach

Acknowledging that scale is both complex and socially constructed (Born & Purcell, 2006), this study adopted a regional approach to frame and guide the research. First I will attempt to define local and regional food systems, including the distinction between the two, and then I will review relevant scholarly work.

The concept of “local” in food systems is quite popular but ill-defined. For instance, Selfa and Qazi (2005) found that producers and consumers in two Washington counties varied greatly in how they defined local food, with criteria ranging from state and county boundaries, to face-to-face relationships, to the freshness of food. In general, it appears that geographic proximity (e.g., miles between producer and consumer), social proximity (e.g., face-to-face market transactions), political boundaries (e.g., state or county lines), and distribution networks (e.g., short food supply chains) are all important—and not mutually exclusive—factors in determining whether or not a food is local (Hand & Martinez, 2010; Selfa & Qazi, 2005).

Regional food systems are sometimes included in discussions of local food, although most would agree that they represent distinct scalar concepts, with regional indicating a larger geographic area than local. Currently there is no consensus as to their respective definitions. Interestingly, in the 2008 Farm Bill, “Food, Conservation, and Energy Act,” Congress failed to distinguish between the two concepts, defining a *locally or regionally produced agricultural food product* as one that is either transported less than 400 miles from the origin of the product, or distributed in the state in which the product was produced (§ 6015). Other definitions treat the two terms separately, but opt for less precise meanings: “A food system is local when it allows food producers and their customers to interact face-to-face; regional systems serve larger geographical areas,

often within a state or metro area” (Leopold Center for Sustainable Agriculture). In Vermont, the Farm to Plate (F2P) Initiative defines *local* as within Vermont + 30 miles and *regional* as New England, New York, and southern Quebec. Yet, it has been observed that Vermont-made cheeses are often promoted as “local” by stores in New York City and other “regional” locales (Vermont Sustainable Jobs Fund, 2010). This suggests that perceptions of local and regional vary depending on the context, including geographic location, whether it is urban or rural, and the type of product being sold (e.g., specialty products versus everyday foodstuffs).

Despite these imprecise definitions, Clancy and Ruhf (2010) suggest that a “regionalized” food system (where regional is defined as multi-state) may be the “optimal model to meet the goals of a sustainable, secure, and resilient food system.” Drawing on Wallis’s theory of regionalism, they refute the popular conception that local food systems are always better in terms of environmental, economic, and social sustainability—common goals of alternative food systems—and argue that ideal regional food systems will lead to “maximum resilience, minimum importation, and significant economic and social return to all stakeholders in the region.” Moreover, they typically offer producers additional markets and distribution options: “A regional food system is comprised of multiple marketing options for farms of all sizes that include local markets as well as broader regional supply chains, thereby providing farmers with more market opportunities that play out through various supply chain structures.” This is nicely illustrated by the case of Tomales Bay Food Company, which saw the need to expand their geographic scope given the situation of local market saturation: “Even in so rarified

a locality as Marin County, California, there is not enough of an artisanal cheese market to support the cheese or the farmers” (Fairfax, 2001, p. 624).

Finally, Jarosz (2000) advocates for regional, micro-level approaches to the study of social relationships in the food system. She proposes that the viability and vibrancy of regional food networks depends on relations of cooperation and trust that exist among actors—e.g., producers, retailers, and consumers—in the network, and that “exploring and detailing these relationships ... *within specific regional geographies* of these networks are critical for furthering cooperation and trust ... [and] will yield an understanding of the opportunities and obstacles for participants in the networks” (p. 279, emphasis added).

Given the current emphasis in food systems dialogue and scholarship on the importance of social relationships and networks, it is surprising that there has been relatively little application of social network analysis in food systems research. Social network analysis (SNA) has been used widely throughout the social, natural and behavioral sciences (Wasserman and Faust, 1994), including ecology (Luczkovich, Borgatti, Johnson, & Everett, 2003), natural resource management (Sandström & Rova, 2010), and supply chain management (Borgatti & Li, 2009). While SNA has not yet been applied extensively in food systems, a growing appreciation for the interconnectedness and interdependence of the actors involved in getting food from farm to table suggests that it may prove to be a useful tool in the continuing study of alternative food systems.

Summary of Literature Review

In sum, this body of literature provides a comprehensive theoretical framework for this thesis project on cheesemongers in the Vermont artisan cheese social network.

Social values related to the place and practices of Vermont artisan cheese production are important for consumer sensory experience and preference—an integral part of what actually makes cheese taste good to consumers. Narratives, or cheese stories, have been identified as a vehicle for communicating these values, thereby transferring meaning from the cheese to the consumer. In spatially extended supply chains, outside of the production context, retailers serve as a proxy for producers, thereby mediating between producers and consumers. There is a need to better understand how this process of communication and meaning transfer happens through the cheesemonger conduit. Thus, the literature consulted in this review suggests consumer preference for Vermont artisan cheese is a complex sensory and social phenomenon based on embedded social values relating to place, and that cheesemongers play a key role in communicating these values to consumers. The primary objective of the ethnography is to better understand how this process occurs in practice.

CHAPTER THREE

RESEARCH METHODOLOGY & METHODS I

In order to better understand the complex roles and relations of cheesemongers and other retail professionals in the regional Vermont artisan cheese social network, I conducted a mixed-methods transdisciplinary study that combined ethnographic fieldwork, survey methods, and social network analysis. This combination of qualitative and quantitative methods was selected as a way to capture the complexity of social network structure, content, and process. In particular, ethnography offers the opportunity to interweave more formal and quantitative SNA measures with rich qualitative description (Edwards and Crossley, 2009).

The description of the research methods is separated into two chapters in an effort to maintain organizational coherence for readers. This chapter presents the methods for the ethnographic component, including the theory behind ethnography as a methodology, a detailed description of both sites of fieldwork and the research activities I undertook at each site, as well as the procedures for data analysis. I reserve the methods associated with the survey and social network analysis for Chapter 5, such that it directly precedes the presentation and discussion of those results.

Transdisciplinary Research

According to Wickson, Carew, and Russell (2006) transdisciplinary (TD) research is characterized by an “integration of different disciplinary methodologies and, ideally, epistemologies” (p. 1050). They suggest, moreover, that:

An important characteristic feature of TD methodology is the way in which it *continues to evolve in an iterative relationship with the research*. Such a methodology continues to develop over the course of the project in response to

the research context and the learning and changing perspectives of stakeholders in the research. The implication of this is that TD researchers *go beyond a linear application of a static methodology and aim for an evolving, dynamic, or responsive methodology that is iterative and an ongoing part of the research process*. (p. 1051; emphasis added)

This transdisciplinary thesis integrated two distinct methodologies: ethnography, which is primarily associated with the discipline of anthropology, and social network analysis, which is a key technique in sociology but has roots in mathematics and social psychology, as well as anthropology. Scott notes that (2000):

It is undoubtedly the case that social network analysis embodies a particular theoretical orientation towards the *structure* of the social world ... But it seems unlikely that any one substantive theory should be regarded as embodying the essence of social network analysis. (p. 37)

Also in line with a TD approach, the research process was evolving, dynamic, and responsive; for instance, the ethnography guided the design and content of the survey and provided a foundation of contextual knowledge for the social network analysis. I also continually adjusted the methods of both components in response to the research context and emergent concepts.

In addition to being highly iterative, this thesis was primarily inductive, as opposed to deductive. In deductive research, the researcher begins with hypotheses and then sets out to test those hypotheses. Inductive researchers, on the other hand, begin with as few preconceptions or expectations as possible. According to sociologist and ethnographer Karen O'Reilly (n.d.), the strength of an inductive approach is that going in with an open mind—or “blank slate”—allows the researcher to learn as much as possible about the group or phenomenon being studied. However, it is important to recognize that every researcher has some degree of preconceptions, research theories and

goals, as well as practical limitations. Indeed, the previous chapter's literature review was framed in large part by social theory, and I outlined clear research questions and goals in the Introduction. Moreover, personal biases of the researcher stemming from personality, preferences, social status, and life experiences can influence what is deemed to be important and how it is interpreted. By acknowledging and accepting these theoretical, practical, and personal realities through an ongoing process known as *reflexivity*, the researcher can try to minimize their effects.

Locations of Research

The two geographic sites of fieldwork were Cambridge, Massachusetts and Madison, Wisconsin. The survey was distributed to Vermont cheesemakers via e-mail. Follow-up phone calls, as well as data analysis for both components, took place at the University of Vermont in Burlington, VT. All research protocols were approved by the Institutional Review Board at the University of Vermont.

Ethnography

The first phase of the research project was qualitative in nature and centered upon ethnography. According to Berg (2012), ethnography is “primarily a process that attempts to describe and interpret social expressions between people and groups” (p. 197). O'Reilly (2009) defines it as “a methodology – a theory, or set of ideas – about research that rests on a number of fundamental criteria” (p. 3). She proceeds to describe these criteria: “Ethnography draws on a family of methods, involving direct and sustained contact with human agents, within the context of their daily lives (and culture), watching what happens, listening to what is said, and asking questions” (p. 3).

Participant observation is the main method of ethnography. As its name indicates, participant observation requires not just being a passive spectator looking in from the outside but taking on an active role within one's community of interest. As O'Reilly (2009) puts it, the participant observer "is participating in order to observe, notice, record, and try to make sense of actions and events" (p. 152). Moreover, fieldwork – "the period of primary data collection that is conducted out of the office or library" (p. 2) – "enables us to see people acting informally and spontaneously ... Participation thus gives an insight into things people may otherwise forget to mention or would not normally want to discuss" (p. 155). In other words, researchers who engage in participant observation have access to a more realistic picture of what is actually happening. This is particularly important when studying everyday processes and practices. In addition to participant-observation, ethnographic fieldwork can involve individual interviews, asking questions, taking photographs, and document collection (O'Reilly, 2009).

Ethnographic methods and fieldwork have previously been used to study artisan cheese and the various actors involved in its production, distribution, and sales. For example, Roberts et al.'s (2008) study of cheesemongers involved traveling to several cheese shops in the northeastern U.S., engaging in participant and non-participant observation, and conducting interviews with store owners and managers. Paxson (2012) also used a range of ethnographic methods in her anthropological study of American artisanal cheesemakers, including visits to dairy farms for observation, formal and informal interviews with cheesemakers, and participant observation on a sheep dairy farm in Vermont. Most recently, MacDonald (2013) gathered ethnographic data by attending a biennial event (*Cheese!*), organized by Slow Food International, devoted to the education,

celebration, and promotion of artisan cheese. The fact that these scholars come from diverse fields—marketing and business, anthropology, and human geography, respectively—demonstrates both the usefulness of ethnography in transdisciplinary research, as well as the suitability of a transdisciplinary approach to researching artisan cheese. This thesis combined methodological elements from all three studies. Next, I provide further detail about the two sites of fieldwork, including geographic location, rationale for why each was chosen, and the various activities engaged in at each place.

Site 1: Specialty Cheese Shop

In order to better understand how knowledge about Vermont artisan cheese is transmitted to consumers on the ground, I conducted ethnographic research at a prominent specialty cheese shop located in Cambridge, MA. This site was chosen because, first, the nearby city of Boston is the largest metropolis in New England, which makes it an important regional market for Vermont's food (especially dairy) products; and second, researchers in my lab have pre-established social connections to this particular store through past and present employees, which was essential for gaining initial access and consent for this project.

Research activities. As a participant observer, I worked behind the cheese counter alongside cheesemongers for approximately one week. From this vantage point, I had access to the everyday activities and interactions of cheesemongers and artisan cheese consumers. I went in with the guiding objective to observe and record stories, conversations, and ideas about Vermont artisan cheese, focusing specifically on the types of knowledge transmitted to customers (Research Question #1), and how stories told about Vermont and Vermont cheese help to build consumer sensory preference (Research

Question #2). I stowed a small notebook in an inconspicuous location close to the counter so that I could regularly record my observations without having to leave the vicinity.

My role as a participant—a store employee, or cheesemonger-in-training—was more passive than active. Since I did not have the knowledge or experience to assist customers with their purchases of cheese, I was assigned other tasks, such as setting up cheese displays; cutting, wrapping, and labeling cheeses; packaging prepared food items; and restocking shelves near the cheese counter that displayed popular cheese accompaniments (e.g., crackers, preserves). Most of the time these behind-the-scenes work activities allowed me to stay within earshot of the cheese counter, which meant that I could attend to customer interactions without their awareness. While I was candid with employees of the cheese shop about why I was there, I tried to avoid telling customers that I was conducting research in an effort to reduce the potential for reactivity.

During times of relative quiet or inactivity at the store I took the opportunity to take photographs, converse with cheesemongers, and ask questions—“[d]irected questions in order to address research questions” as well as questions that emerged spontaneously in the field (O’Reilly, 152). Through these primarily informal conversations with store employees, I accessed their knowledge and perceptions of Vermont and Vermont artisan cheese, learned about their personal histories in cheese retail, and provided them the opportunity to steer the conversation and teach me about cheese more generally. I also conducted a more formal—but still semi-structured—interview, which resembled an in-depth, prolonged conversation, with the store’s domestic cheese buyer. Due to his relational proximity to, and vast personal knowledge of, Vermont cheesemakers, this individual became a “key participant” (O’Reilly, p. 136).

Overall, this regional ethnographic case study, although short in duration, provided a significant amount of depth to my understanding of Vermont artisan cheese, cheesemongers, and their role in shaping consumer preference. As Paxson (2012) reflects, the “rudimentary experience” (p. 24) gained from her 12-day participant observation at a sheep dairy farm became invaluable later when conversing with cheesemakers. I perceived a similar benefit from my brief but intense exposure to the world of cheese and cheese retail when I was surrounded by industry professionals during the second phase of ethnography, detailed next.

Site 2: Conference of the American Cheese Society

The second site of ethnographic fieldwork was the 2013 American Cheese Society (ACS) Conference in Madison, WI. ACS is a not-for-profit organization that works to support and promote American-made specialty and artisanal cheeses, and provide educational and networking opportunities for its members: over 1500 producers, distributors, suppliers, retailers, chefs, academics, and consumers who are passionate about cheese (American Cheese Society, 2011). The conference, which is held in a different city each year, features a keynote address, a town meeting to discuss current issues, educational sessions and workshops, and several networking events. Thus, it is an annual opportunity to promote the organization and strengthen social ties of its members.

Although it did not provide the same window into everyday life that the cheese shop offered, participant-observation at this important annual event afforded me access to a large number of cheese retailers and cheesemakers at one time and in one place. Similar to how MacDonald (2013) describes the biennial Slow Food festival *Cheese!* that he attended in Italy, this U.S.-based conference is a “concentrated time-space” in which

diverse actors from different parts of the artisan cheese supply chain come together. According to Paxson (2012), who attended four ACS meetings over the course of her ethnographic research, the event offers an “unparalleled opportunity to learn about the concerns of and debates among people in the artisan cheese world” (p. 24), built upon both formal and informal interactions and dialogue between and among cheesemakers, retailers, and distributors.

Research activities. As a participant observer, I attended the conference as a first-time member of the Society and arrived a day early in order to volunteer. I purposefully chose to volunteer for the Cheese Sale preparations, which involved cutting, wrapping, and labeling cheese—activities that I had some basic experience with from my week at Formaggio Kitchen. My initial hope was that this particular volunteer experience would be another opportunity to work alongside cheesemongers; however, most of the volunteers I met did not come from the retail sector and were either professionals in another realm of the industry or cheese consumer-enthusiasts.

Following my day of volunteering, I spent most of my time at the conference attending educational sessions geared specifically towards retailers and distributors. I selected four sessions to attend, based on their potential to shed light on the role of retailers, the relationship between retailers and producers, and the cheesemonger profession. The sessions were: *An International View of Cheesemongering*; *Educating for Passion: Developing Cheesemongers for Life*; *Framing Effective Conversations between Cheesemakers and Retailers*; and *Cut & Wrap vs. Cut to Order: Who Wins?* These sessions were an invaluable source of more generalizable information about cheese retailers, such as the types of specialized knowledge that retailers are expected to have,

their perceived roles and responsibilities, and the major issues they face, as well as the current discourse surrounding the cultural practice of cheesemongering in the U.S. and abroad.

In addition to volunteering and educational events, I attended several networking events. For example, at the “Meet the Cheesemaker” event, I sought out and spoke to every Vermont cheesemaker in attendance (a total of 7). (It proved much more difficult to single out retailers from my region of interest.) I used these interactions to introduce myself, explain my research, exchange contact information, and request their participation in the upcoming social network survey. These brief meetings, as well as longer, informal conversations I had at other networking events during the conference with those in the Vermont artisan cheese community, helped to further inform my survey design and content.

In sum, the purpose of this study’s ethnographic component was threefold. First, it allowed for a rich, detailed account of how cheese retailers transmit specialized knowledge about Vermont artisan cheese to consumers in an everyday context. Second, it allowed me to establish rapport and familiarity with both cheesemongers and cheesemakers, which was important for obtaining accurate information during this and future phases of the research, and securing participation for the social network survey. Third, it was instrumental in informing the design and content of the survey questions.

Data Analysis

After transcribing all field notes and audio interviews, I used the computer-assisted qualitative data analysis program HyperRESEARCH (3.5.2) to organize and code the qualitative data. I then conducted thematic analysis, which is a “method for

identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). I chose to use thematic analysis because it is flexible and accessible, especially for new and inexperienced qualitative researchers. Another benefit of thematic analysis, according to Braun & Clarke (2006), is that it is “not wedded to any pre-existing theoretical framework” (p. 81), which was useful for this project given its transdisciplinary nature. Finally, I conducted a content analysis of the photographs that I took of store signage.

Summary of Methodology

In sum, the methods for the qualitative ethnographic component of this thesis research reflect what sociologist and ethnographer Karen O’Reilly (n.d.) calls a “constant to and fro (an iteration), of participating, observing, writing, reflecting, reading, thinking, talking, listening, participating, in a circular rather than a linear way.” However, given the structural constraints of a research paper, this chapter outlined a necessarily linear, chronological description of the research processes involved in the qualitative component. In the next chapter I present the findings from the ethnography using thick narrative description.

CHAPTER FOUR

ETHNOGRAPHIC NARRATIVE

Introduction

I drove down from Vermont on an overcast Monday afternoon in early June, arriving over an hour early for my 2:00PM shift. Located in a residential area in Cambridge, MA, Formaggio Kitchen is both a nationally-regarded specialty cheese shop and a community institution, self-described as “a gourmand’s paradise doubling as a neighborhood grocer” (Formaggio Kitchen, n.d.). In addition to its renowned “cheese wall” and aging caves, the store contains a busy kitchen where soups, sandwiches, and deli items are prepared daily; a tiny bakery; an independently-owned flower shop; and a grocery section where you can find fresh produce, bulk nuts, gourmet granola, and grind-your-own coffee. In the section of the store that houses the cheese counter and deli, Spanish Jamon legs hang from the ceiling and shelves on the perimeter brim with specialty food items from around the globe: countless varieties of vinegar and olive oil, dried heirloom beans and Italian handmade pastas, specialty crackers and sardines, mustards, hot sauces, and a dizzying array of spices. The elaborate display of cheeses takes up every last inch of counter space, under which a transparent refrigerated case houses even more cheese along with in-house charcuterie.

When the handful of customers being helped at the counter had cleared out, one of the cheesemongers turned to me and smiled: “How can I help you?” It was Trent, the domestic cheese buyer and the person I had been instructed to ask for. We decided that I should park my car at my friend’s house, which was a couple of miles away. After trying to direct me to her house verbally, Trent disappeared for a minute and came back with

printed directions and a map, giving me my first taste of what it is like to be a customer at a full-service cheese shop. For the next five days I would see what it was like to be on the other side of the counter.

Working at Formaggio Kitchen tantalized my senses in a way I had never experienced. From my post at the cheese counter, hundreds of novel food products and eye-catching labels vied for my visual attention while mouthwatering aromas from the kitchen on one side and the bakery on the other took turns teasing my nostrils. Fortunately, in light of all these enticing sights and smells, eating on the job was encouraged to the point that it became a primary activity. One cheesemonger told me that tasting cheese is the best way to learn about it, and another instructed: “Whenever a cheese is out, try it.” More often than not, when a customer was offered a sample, I was too. And when there was downtime between customers, it was not uncommon for a monger to cut a small piece of their favorite cheese or charcuterie for me to try. As an artisan cheese novice, to say that I consumed more varieties of cheese in one week than I had in my entire life is not an exaggeration.

This being my first experience in a specialized cheese shop, I was overwhelmed by the scope of cheeses—more than two hundred varieties according to their website—laid out beautifully on the counter: wheels of varying diameter and width, all of them cut to expose smooth inside surfaces, a spectrum of orange, yellow, and white, the shiny plastic wrap pulled taut, appearing effortlessly wrinkle-free (although I soon found this is much harder than it looks). This “wall” is created each morning by a cheesemonger, who unwraps each piece of cheese, scrapes it with a knife, and then re-wraps it with a fresh piece of plastic. It is organized geographically by country—Italy, France, Spain,

Switzerland, Netherlands—and by style for domestic cheeses. The cheesemongers at Formaggio are particularly proud of their domestic selection and make a point to highlight it to customers. I was told by one of the more experienced cheesemongers that, while they have always had a large and high-quality selection of cheeses, the domestic cheeses are much stronger than they used to be, both in quantity—there has been “exponential growth” in the last five years or so—and quality. Space behind the counter was tight, requiring cheesemongers to carefully and continually maneuver around each other, so I staked out a small area to stand, off to the side of the cheese counter yet conveniently within sight and earshot of the domestic cheese section. It was a perfect vantage point to visually familiarize myself with the Vermont cheeses and to listen in on conversations about them.

Among the domestic cheeses, Vermont dominates to the point that when you glance over the individual cheese signs, which bear the name of the cheese, cheesemaker, and location of production, locations that don’t end with “VT” stick out as anomalies. I counted just fewer than thirty Vermont cheeses for sale. In contrast, the other New England states *combined* tallied less than ten. There were also one or two cheeses each from New York, Pennsylvania, and Wisconsin. With the exception of one from Oregon, the West Coast—especially California, a major artisan cheese hub—was conspicuously absent. Why? Because, as one cheesemonger proudly told me, Formaggio Kitchen is “all about the local.” This was clear both from conversations with cheesemongers and the signs used to identify and describe individual cheeses. (A sign for Mad River Blue from Waitsfield, VT proclaimed in the top corner “Local and delicious!”). Thus, although I

undertook the ethnography at Formaggio Kitchen as a *regional* case study, I quickly discovered that Vermont cheeses are being embraced and promoted as local.

Spatial vs. Social Values: The Multitudes of Place

At the same time that Formaggio Kitchen makes a deliberate effort to carry and highlight cheeses from Vermont and the Northeast region, the store philosophy is more about locally-*based* food than local food. One webpage excerpt, notably reminiscent of Slow Food International discourse, states: “We believe in the one-herd farmer in Corsica, the tiny storefront baker in Tuscany and the fifth-generation olive grower in Andalusia, each striving to preserve their traditional methods in a world of mass-produced, industrial food.” Trent explained the commonality between the two approaches as knowing where your food comes from. He elaborated:

It’s the same thing as where you get your lettuce from, you know, if you want to be local—not necessarily local, but knowing where your food is coming from. It’s important, slash it’s really just interesting and cool, and you know that it’s a good, solid, wholesome product. You know it hasn’t switched hands a hundred times. You know where it’s from—where it came from and now it’s here.

For Trent, it is not so much about geographic proximity as it is about intact knowledge of where and how the food was produced, and by whom—in one word, *terroir*.

A few weeks later, I heard this sentiment echoed by Odessa Piper, the keynote speaker at the 2013 American Cheese Society conference, long-time restaurateur and chef in Madison, and widely-regarded as a pioneer in the farm-to-table restaurant movement in the U.S. Like Trent, Piper is not “rigidly local” in that she does not believe there is a definitive, precise distance or radius. Rather, she likes to think of local as the “place inside the distance.” Moreover, she ties the concept to social values relating to place, *terroir*, and regard: “I think, operationally, *local* is being used as code for values of

appreciation,” values that include “knowing the producer, tasting the place (*gout d’terroir*), and having a specific cultural character.”

At Formaggio Kitchen, these “values of appreciation” are not only embraced by the cheesemongers; I observed customers utilizing a range of place-based values to help guide their purchases, though the precise calculus varied. For instance, one man appeared to make his decision entirely on the basis of geographic location: “Do you have any cheeses from Pennsylvania?” he asked. Trent had one and the man purchased a “good-sized piece” without sampling. Here, an extrinsic attribute—produced in Pennsylvania—was evidently more important than intrinsic characteristics like the style or flavor of the cheese. The fact that Pennsylvania is not well-known for artisan cheese suggests that he may have had a personal connection to the state.

A more common geographically-based request was for local or regional cheeses, of which there were well over thirty to choose from. For example, one woman came in looking to buy a couple of “New England cheeses.” Since Vermont cheeses make up the bulk of the domestic section—and thus even more of the New England options—it is not surprising that she ended up with two from Vermont. She picked out the first cheese without assistance, explaining to the monger: “We literally used to live next-door to these people.” Thus, more than just a concern for proximate geographic location, her final decision reveals the multitudes of place.

In another example of preference based at the level of the farm or cheesemaker—not simply geographic place—a customer looking at domestic cheeses on the counter pointed to one from New York and asked the cheesemonger assisting her: “Do you have anything else by them?” The monger replied, “No, that’s the only one,” and

recommended something else. “Well,” the customer deliberated, “since I know these guys I’ll take them again.” Thus, whereas some customers appeared to base their purchasing decisions entirely on geographic region, others relied primarily on social reasons—in this case, familiarity with a producer. In sum, consumer preference for artisan cheese relies on values relating to both spatial and social relations.

Cheese Stories

For consumers who do not come in with a particular geographic location or cheesemaker in mind, or those who wish to try something new or unfamiliar, this kind of specialized contextualizing information about the place of production can be communicated at the point of sale. Cheesemongers and producers refer to this as the cheese story, or simply *the story*. The story allows consumers to connect with and better understand the production context—the who, where, and how associated with the cheese. As we will see, specific elements of the cheese story might include the name(s) of individual cheesemakers, the name of the farm, references to family, information about the animals, the cheese’s handmade nature, as well as anecdotes or facts specific to the cheese. As Paxson (2013) pointed out, while the story can be included on packaging and labels, it is more effective when communicated face-to-face. Farmers’ markets or on-farm stores are ideal venues for this social interaction to occur between consumers and cheesemakers in a given region. Yet, while these may be common mechanisms for procuring cheese in Vermont—thanks to a high per capita proportion of artisan cheesemakers and farmers’ markets—a majority of artisan cheese consumers will never meet the producer or go to the farm. In these cases, consumers can get the cheese story from retailers in their local community. Indeed, “[a] major role for the cheesemonger is to

convey the pedigree and place of cheese for the consumer” (Roberts et al., 2008, p. 305). As we will see, retailers at Formaggio use two primary vehicles for conveying the story: passively through signage and actively through social interactions with customers.

Signage

A common feature of most specialty cheese shops and cheese departments within grocery stores is special signage used to identify each cheese and, often, to convey information about the product’s taste, place, and story to customers. At Formaggio Kitchen, signage is not only a vehicle for this specialized information, it is part of the shop’s unique character and identity. Small rectangular signs attached to narrow wooden pegs poke up out of each block and wheel of cheese identifying the name of the cheese and, for domestic cheeses, the location of production (town and state). In addition to being aesthetically-pleasing, the signs are handwritten, giving them a personal touch. Thus, each sign at Formaggio Kitchen is unique, handmade, and irreproducible, just like the cheeses that are sold there.

In analyzing Formaggio Kitchen’s signage for Vermont cheeses, I found four main elements: (1) Sensory descriptions related to intrinsic attributes of the cheese, such as flavor profile and texture; (2) Story elements related to extrinsic attributes of the cheese, such as place, people, and production context; (3) Words or phrases that authenticate the cheese for consumers; and (4) Evidence of social relationships and/or personal connections of the cheesemonger to the cheese and cheesemaker. While a sign did not always contain all four elements, the ones that I observed for Vermont artisan cheese always included at least two or three, with sensory and story elements being most common (see Table 1).

Table 1

Key Elements of Signage for Vermont Artisan Cheeses

Cheese (Location)	Sensory	Story	Authentication	Personal connection
<i>Oma (Waitsfield, VT)</i>	Soft, buttery paste, mild and balanced - both sweet and pungent.	...from the von Trapps	A delightful lightly washed cow's milk cheese	
<i>Moses Sleeper (Greensboro, VT)</i>	Rich, buttery texture, faintly mushroomy.	...from Jasper Hill Farm.	Gorgeous domestic version of a Camembert	
<i>Bayley Hazen Blue (Greensboro, VT)</i>	This cheese can be farmy, grassy, nutty and can sometimes have anise-like flavors.		A delicious crumbly cow milk blue!	
<i>Lake's Edge (Salisbury, VT)</i>	Perfect creamy smooth mouthfeel, grassy tart flavor, with a pretty line of vegetable ash running through the center.	Handmade by Greg and Hannah - husband and wife team, from their herd of 80 goats.		
<i>Winnimere (Greensboro, VT)</i>	Woodsy, fruity, & savory.	Made by the talented and important cheesemakers at Jasper Hill Farm.	An unbelievable washed-rind cow's milk cheese wrapped in spruce bark.	
<i>Twig Farm Square (Cornwall, VT)</i>	Earthy & floral with a gorgeous natural rind.	From Michael Lee @ Twig Farm	Raw goat's milk	
<i>Twig Farm Goat Tomme (Cornwall, VT)</i>		100% goat's milk from a herd of 31 animals	*Staff favorite! Artisan cheese at its finest.	
<i>Butterwick (Cornwall, VT)</i>	Funky, stinky, with a grassy bite	Michael Lee...	As if we needed any proof, Michael Lee shows he can make awesome cheese with cow's milk.	
<i>Rupert (West Pawlet, VT)</i>	it's full bodied with some sweet notes	...from Consider Bardwell Farm... Cheesemaker Chris Grey makes it based on a Gruyere recipe ... He marks it with a whale because it's a 'whale of a cheese'!!	We really like this Jersey cow milk cheese	
<i>Cabot Clothbound Cheddar</i>	... salty, oniony, fruity - so so so satisfying!	Venerable VT cheddar producer - Cabot Creamery, teamed up with the guys at Jasper Hill Cellars to produce	Our favorite cheddar!!	We handpick every wheel we sell so we always get

this lovely, single
farm English style
clothbound cheddar.

the
wonderful,
cheddar-y
flavors we
love

Note. Excerpts from signs at Formaggio Kitchen.

An exemplar of how a sign can communicate several elements of the story is that of Lake's Edge, which begins: "Handmade by Greg and Hannah - husband and wife team, from their herd of 80 goats." It then goes on to include sensory and aesthetic descriptions: "Perfect creamy smooth mouthfeel, grassy tart flavor, with a pretty line of vegetable ash running through the center" (see Figure 1, below left).



Figure 1. Lake's Edge



Figure 2. Goat Tomme

Using a slightly different format, the sign for Twig Farm's Goat Tomme provides strong authentication by calling it a "Staff favorite!" and "Artisan cheese at its finest," while

also including story elements related to the kind of animals and herd size: “100% goat's milk from a herd of 31 animals” (see Figure 2, above right).

Story elements also frequently involve the name of the farm or individual cheesemaker. Take, for instance, the sign for Rupert: “We really like this Jersey cow milk cheese from Consider Bardwell Farm. Cheesemaker Chris Grey makes it based on a Gruyere recipe - so it's full bodied with some sweet notes. He marks it with a whale because it's a ‘whale of a cheese’!!” (see Figure 3, below left). Here, in addition to referencing the person and place responsible for its production, the sign includes a unique anecdote specific to the cheese giving the story a personalized element. It also incorporates a brief sensory description and authenticating phrase.



Figure 3. Rupert



Figure 4. Cabot Clothbound Cheddar

Finally, all four elements of signage are present in the prominent sign for Cabot Clothbound Cheddar, Formaggio Kitchen's best-selling domestic cheese. The sign, which is notably bigger than the other signs and is unique in its use of color, first combines

authentication and elements of the story: “Our favorite cheddar!! Venerable VT cheddar producer - Cabot Creamery, teamed up with the guys at Jasper Hill Cellars to produce this lovely, single farm English style clothbound cheddar” (see Figure 4, above right). After authenticating the cheese and providing some social information about its production, the sign goes on to note: “We handpick every wheel we sell so we always get the wonderful, cheddar-y flavors we love - salty, oniony, fruity - so so so satisfying!” This element of being handpicked indicates a personal connection of the cheesemongers at Formaggio to the cheese, thereby further authenticating the cheese and contributing a social dimension to the narrative of how the cheese got from the farm to the cheese counter. Moreover, it connects this social story to a particular flavor profile, claiming some responsibility for the taste.

Social Interactions

Signage is a mechanism for retailers to communicate at least a part of the cheese story without interacting with a customer. The benefit is that it is always available, even when the cheesemonger is busy. Typically, however, when a customer is close enough to the cheese counter to read the signs, an interaction will occur. Frequently this is out of necessity since many cheeses are bigger blocks or wheels that must be cut-to-order and then wrapped. But practicality aside, social interactions occur because they are part of the alternative shopping experience characteristic of traditional cheese shops—an experience centered on a high level of customer service and interaction (Roberts et al., 2008). In these interactions, cheesemongers provide customers with some combination of samples, recommendations, and stories to guide them in their selections and purchases. As I will

demonstrate in the next section, especially when sampling is involved, it is less a sales interaction than it is a sensory and social experience for the consumer.

Cheese tastings. Allowing customers to sample cheeses before buying is an important part of maintaining the look and feel of a traditional cheese shop (Roberts et al., 2008). At a practical level, given the potential for batch-to-batch and seasonal variations, sampling allows customers to taste a cheese to see if they like it before purchasing. However, there is an important distinction between *sample tables*, which are set up around the store with small pre-cut pieces of cheese for customers to help themselves to, and the sampling—or *cheese tasting*—that occurs at the counter and involves a shared dialogue between the customer and the cheesemonger. It is with regard to the latter that sensory experience quite literally becomes social experience. Indeed, one cheesemonger at the ACS conference compared doing a tasting to “taking someone on a journey.” Another felt strongly that the first thing a cheesemonger should do is offer the customer a taste.

Cheese tastings were a frequent occurrence at Formaggio Kitchen, sometimes initiated by the cheesemonger and other times requested by the customer: “Can I taste it?” The dialogues that accompanied these tastings varied in content from purely sensory description and evaluation to some hybrid of sensory information and story. To illustrate these two broad types of interactions, consider the following field note excerpts of conversations overheard at the cheese counter, both of which involved an attempt to find a blue cheese—infamous for being strong and funky—suited to a customer’s preference.

Tasting a sample of blue cheese the cheesemonger had provided, a customer remarked: “Too strong.”

“Okay.” Then, handing off another sample-spoonful: “How about this one?”

“Too soft,” the customer said after tasting it, and then quickly added, “Sorry.”
“No, no,” the monger reassured her. “I want you to find the perfect cheese!”

While this excerpt nicely typifies a cheesemonger’s ultimate goals of customer service and satisfaction, it is limited to sensory evaluation. Compare this to the next interaction, in which a cheesemonger is again trying to help a customer select a blue cheese. The conversation begins as focused on intrinsic attributes of the cheese, but transitions during the act of tasting to include some generalized information about place:

A man came in looking to buy a few cheeses. The cheesemonger recommended that one be a blue. “Do you like your blues creamy, strong...?” she asked. He paused for a second and replied, “I like them creamy *and* strong.” “I’ll have you try Caveman,” she said, reaching into the cooler beneath the counter and scraping a small amount of cheese onto a white plastic spoon. “This is actually from Oregon.” “From Oregon?” he repeated as he ate the sample. “It’s wonderful.”

Here, the cheesemonger combined sensory analysis with information about the place of production to contextualize the taste experience and ultimately shape consumer preference. As the next dialogue shows, however, communicating place during a cheese tasting with a customer is not always so explicit or purposeful:

An older man at the cheese counter began the conversation by declaring his preference for a Vermont cheese: “I’m a Winnimere fan. Do I try Mt. Alice?” The monger replied, “It’s very mild. Probably Dorset or Oma for you.” She gave him a sample of Dorset, and the man said, “I think I prefer the Winnimere.” “Do we have to stay local,” the monger asked, “or can we expand?” “We can expand.”

At first glance, aside from the names of the cheeses, extrinsic attributes related to place or story did not appear to play a role in this interaction. Rather, the customer seemed to treat it as purely sensory in function, looking to refine or expand on his already-established tastes. A deeper examination, however, reveals two interesting things. First, all of the cheeses mentioned are from Vermont (and thus “local”), and second, the names of the

cheeses themselves work to communicate place. In particular, Winnimere is “named for a corner of Caspian Lake, a tourist destination vital to the region’s economy” (Cellars at Jasper Hill); Mt. Alice is the name of the “peak southeast of our farm” (von Trapp Farmstead); Oma, which is German for grandmother, is named for the von Trapp cheesemaker-brothers’ grandmother who started their family farm; and Dorset, made by Consider Bardwell Farm, is the name of a town in Vermont that is near the farm (in fact, nearly all of Consider Bardwell’s cheeses are named for small towns surrounding their 300-acre farm). This confirms that unique cheese names are a way for cheesemakers to communicate part of the story in spatial proximate and spatially extended supply chains.

While not all Vermont cheeses are named for a particular place or part of the cheese story, it is clearly a common theme. This trend, combined with social elements of story included on the majority of Vermont cheese signs, suggests that is difficult for Vermont artisan cheese consumers at Formaggio Kitchen to avoid learning about the production context. Even when the cheesemonger does not explicitly communicate the cheese story during a tasting, it is likely to be part of the retail context and, thus, likely to become part of the consumer’s knowledge and taste experience. Recall, however, that names and labels are generally seen as being less effective at conveying the story than face-to-face interactions at the time of sale (Paxson, 2013).

Recommendations. Recommendations are another characteristic feature of the cheesemonger-customer social interaction, and a way for cheesemongers to actively shape consumer preference. Consider the following interaction at the cheese counter:

A woman picked up a Vermont cheese (Blue Ledge Farm’s Lake’s Edge) and asked, “Can you tell me if this has some sharpness to it? I think I would really like

that.” The monger suggested a different cheese, and the woman accepted her recommendation without sampling, saying: “I trust you.”

Here, consumer trust and confidence made it possible for the cheesemonger to influence purchasing behavior. This suggests that an individual cheesemonger’s opinion or preference can be an important factor in which cheese a customer decides to try and/or buy. Moreover, as the last example suggests, even when customers do not participate in a tasting, if they receive recommendations or advice they are indirectly accessing the cheesemonger’s specialized knowledge and previous taste experiences.

Indeed, at the ACS conference it surfaced in several panels that tasting cheese is an important part of a cheesemonger’s initial training, ongoing education, and overall professional identity. A retailer on one panel suggested that tastings give new employees “a comprehensive understanding” and “make them comfortable physically and mentally.” For another, sensory training was a matter of pride. All agreed that cheese tastings are not just for new employees; they are a continual part of the job. A retailer from Australia described how employees at her store gather every other week to “taste all the new cheeses, refresh on older ones, and have open conversations” about them, and a French cheesemonger advocated for systematic involvement of all employees in regular tastings to “keep everyone on the same page.”

In addition to a strong knowledge base stemming from sensory training and regular tastings, mongers spoke of the particular importance of sampling from the wheels you are currently selling so that you “understand variations and can talk about it to customers.” This notion of understanding and communicating slight nuances in taste may be unique to retailers of artisan cheese due to its status as an “unfinished commodity”

(Paxson, 2013). This more short-term – sometimes seasonal, sometimes batch-specific – knowledge is demonstrated when a cheesemonger recommends a certain cheese because it is “really nice right now.” Some customers actively seek out this nuanced expertise, like the woman who asked about two Vermont cheeses: “Do you think Goat Tomme is better than Square Tomme right now?” Thus, variation appears to be embraced and even valued as part of the cheese-buying process by cheesemongers and consumers alike.

To reiterate an earlier point, there appears to be a key distinction between tasting and sampling cheese that relates to shared knowledge and dialogue. The kind of retailer expertise just discussed does not arise simply from eating samples of cheese in isolation. According to one monger at ACS, cheese tastings need to be “guided by someone with knowledge” so that employees can learn about the products, supporting the idea that taste formation involves a shared dialogue. Ideally, some of this knowledge will come directly from producers, for instance, by tasting samples together over the phone or by having them come to the store to do demos. This kind of producer-to-retailer education is especially important because it enables producers to explain *why* the cheese looks or tastes a certain way, which undoubtedly relates to how it was made and what the cheesemakers’ intentions were when making it—both integral parts of the cheese story.

Telling the story. At one of the ACS panels I attended, a regional specialty buyer from the natural foods supermarket chain, Whole Foods, suggested that retailers have a responsibility to three things: the customer, the integrity of the cheese, and the story. As illustrated in the previous section, responsibility to the customer is achieved through providing a high standard of service that includes tastings, tailored recommendations, and shared expertise. Conversely, responsibility to the “integrity of the cheese” and the story

both indicate some responsibility to the producer. For instance, strategies cited for maintaining the integrity of cheese, such as food safety plans, temperature control, and strict sanitation measures, are designed not only to guarantee the health and satisfaction of consumers but to “protect the blood, sweat and tears” of producers. One retailer spoke of her store’s strict dating policy, which ensures that a cheese is not out for more than three days, as a key strategy of their “aim to sell cheese in a way that honors the cheesemaker.” Other cheesemongers at ACS also framed their responsibility to the physical integrity of the cheese in a way that underscored respect for producers and for the long and arduous cheesemaking process; as one panelist advised his fellow retailers: “Don’t mess it up at the end of the marathon.” Thus, it is clear that cheesemongers see themselves as bearing great responsibility for upholding the physical quality of the cheeses they sell.

In addition to maintaining physical quality, many retailers see a key part of their job as communicating the social quality, or values, of cheese. Cheesemongers at ACS often framed this responsibility to the cheese story in terms of respect and honor for the cheesemaker: “Our job is to represent the intentions of cheesemakers,” said one retailer. Yet, in contrast to the consensus view that retailers held with regard to sensory training of employees and maintaining the safety and physical integrity of cheese, there seemed to be less agreement as to the purpose and effectiveness of telling the story. For instance, Trent strongly believes that retailers should be “associated with the cheese they are selling” and “be able to know the cheese story,” but he does not think this is common among retailers:

That’s something that I wish and I hope that most stores will do, and I think we pride ourselves on that—telling the story behind the cheese—because it makes it more than just a product that you’re selling. It makes it a story for the customer

who's buying it, it makes it a story for employees to learn ... it becomes history, it becomes, you know, cheese.

This notion that the story makes cheese “more than just a product that you're selling”—makes it *cheese* even—supports Paxson's argument that *terroir* and the story should not be relegated to mere marketing tactics. While Paxson focuses on the various sentiments of cheesemakers in the cultural economy of artisan cheese production, Trent believes the story holds value for consumers and retailers. In this way, the same social, moral, and cultural values that make artisan cheese good for producers to make, and good for consumers to eat, also make it good for retailers to sell.

To highlight one example of how communicating the cheese story occurs in practice, consider the following conversation—an interaction that involves sampling, recommendation, and storytelling—overheard at the cheese counter between a cheesemonger named Allison and two women who asked for recommendations:

“I really like this one called Inspiration. It's from Vermont, a washed rind cow's milk....”

Tasting the sample she had offered, one of the women asked: “Where did you say this was made?”

“Vermont. It's made by this guy and his wife on their little farm where they live with a few children. They have, like, 30 cows and work in small batches.”

The women both agreed that they liked it and had Allison cut and wrap a piece for them.

Here, the cheese story, which paints a rather idyllic image of small-scale farmstead cheese production, becomes part of these consumers' sensory experience and appears to shape their preference. The next day when I met Trent at a restaurant for lunch I mentioned that I had heard the “Inspiration story” and he broke into a huge smile:

I get chills when I hear ... my fellow colleagues/cheesemongers reciting stories that I've told them or that they've learned that I've learned through other people ... It makes me so happy that you're not just saying ‘this tastes good,’ ‘this is

salty,’ ‘this is mild,’ ‘this is creamy,’ ‘this is strong,’ whatever. You’re not saying that. You’re saying ‘Here’s this cheese, you know, a washed rind cheese made by this person in this area, and here’s why this person’s making this cheese.’

Trent clearly feels that the communication of specialized social information, including the intentions of the cheesemaker, trumps more generic sensory descriptions. While he does not expect his colleagues to tell cheese stories every time the opportunity arises, he described the joy and satisfaction he feels when he hears them conveyed to customers:

You’ll hear that because you’ve embedded this seed, you’ve planted this seed of cheese in their heads, and where cheese comes from, and relationships... And hearing mongers recite these things and actually take it in and understand it just makes me the happiest person. I love it.

More than just reciting a story, then, Tripp suggests that cheesemongers internalize and truly understand the origins of the cheese, including social values and relationships.

In contrast to Trent’s near-infectious happiness derived from knowing, telling, and listening to cheese stories, other cheesemongers I came across in my research did not seem to be nearly as enamored. At the ACS conference, where the story came up in all four of the panels I attended, there were mixed views on its importance, which seemed to be related to cultural differences. For instance, at a panel of international cheesemongers, a woman from Australia, where artisan cheese is a relatively new phenomenon, confirmed: “The story sells!” In contrast, the man from Neal’s Yard in London who felt strongly that “the first thing you should do as a cheesemonger is offer a taste,” added forcefully: “Do *not* introduce with a story.” This is the same individual who, in rejecting the importance of locality and place to selling artisan cheese in the U.K., asked, “Is it good? That should be enough.” This suggests that attitudes towards place, locality, and story are, at least in part, culture-dependent.

Yet, even among U.S. cheesemongers there is a lack of consensus about how the story is used and valued in practice. For instance, Gordon Edgar, long-time cheese buyer at Rainbow Grocery Cooperative in San Francisco and author of Cheesemonger: A Life on the Wedge, writes on his website: “Many cheeses have great stories but in the end it’s all about taste.” This notion that the sensory modality is the primary concern was echoed by Gianna, an experienced monger at Formaggio who felt strongly that you cannot sell cheese (or wine, as she is also the wine buyer) just based on a good story—a lesson she says she learned the hard way. Gianna told me how she used to work with a wine distributor that based its purchases primarily on the story. She soon found that some of the wines were “just not good quality,” and “if it isn’t drinkable, you can’t sell it.” Applying this logic to cheese, it is possible to take a high-quality cheese and make it taste worse (recall mongers’ responsibility to the physical integrity of cheese), but you cannot take a low-quality cheese and make it taste better. Moreover, retailers are the ones who must eventually sell the end product, and with a product like cheese, where sampling is not only allowed but encouraged, they are literally feeding consumers. Consequently, Gianna, Edgar, and other mongers are quick to caution against the tendency of relying too heavily on the story such that you neglect the sensory modality. “Quality is number one,” she told me, and echoing Edgar: “It comes down to taste.”

But what is quality? These dialogues seem to treat taste and quality as objective, physiological, and almost interchangeable properties of the cheese. While it is widely understood that taste as preference is at least somewhat subjective and individual, professionals in the artisan cheese world seem to agree that there is a certain degree of objective quality. After all, each year at the conference ACS holds their influential and

illustrious Judging & Competition—the “leading competition of American-made cheeses” in which “ACS’s goal is to give positive recognition to those cheeses that are of the *highest quality* in their *aesthetic and technical evaluation*” (American Cheese Society, n.d., emphasis added). Despite his love for the story, Trent also seems to believe in an objective view of quality. Talking about one Vermont cheesemaker, whom he believes makes “some of the best cheese in the world,” Trent linked the concept of quality to taste and being well-made, and humbly suggested that the ability to discern such quality is related to experience: “I mean, I don’t have, you know, the full grasp on worldly cheeses but I have a pretty good idea of what tastes good, what’s well-made; I work with it all day long. His are on the top.” This confirms the complex meaning of taste as it relates to sensory quality identified by Trubek (2008) and Petrini (2001).

These debates over story and sensory quality bear a strong resemblance to the skepticism towards *terroir* identified by Trubek (2008), which she describes using the metaphor of “the sizzle or the steak.” It appears that Gianna, Edgar and others are skeptical of the cheese story, like the notion of the taste of place, being used as sizzle (i.e., marketing) without the steak (i.e., sensory quality). In other words, does the story simply persuade or dupe people into buying a particular cheese without any regard for whether it tastes good? With this in mind, I asked Trent about the cheese he spoke of as being objectively “on top” in terms of taste and quality: “I know you said you love it, but do you think people love it because of the taste or because the story?”

“I think both,” he replied. “It is such a good cheese—it’s well-made, it tastes great... The Tomme and the Square are just brilliant cheeses. I think the story is usually pretty brief... The story and the flavors of that cheese—just ‘Taste this.’ While they’re eating it you might say, ‘Mark Smith is good, he used to work here. West Cornwall, VT, south of Middlebury, raw milk...’”

Again, the attributes “well-made” and “tastes great” go hand-in-hand to make a “good” (read: high quality) cheese. While he seems to believe that the cheese’s flavors (sensory) and story (social) combine to influence preference, he minimizes the importance of the story by saying it can be brief. Yet, the very next day I was reminded of the inevitability and unpredictability of individual variation in taste when I heard a woman say to the cheesemonger assisting her: “Talk to me about the Goat Tomme.” Smiling a little, Jenna cut a sample and provided some context: “This one’s made by Mark Smith, who used to be the manager of our South End store.” The woman ate the sample and shook her head: “Not enough there.” Thus, even a cheese that Trent called “some of the best cheese in the world” and that embodies such a strong personal connection between the cheesemongers and cheesemaker does not guarantee preference.

Despite some cheesemongers’ skepticism of the story, its importance for communicating specialized information and social values held by producers should not be undermined. At a panel entitled “Framing Effective Conversations between Cheesemakers and Retailers,” a Wisconsin cheesemaker spoke passionately about the need for “the whole supply chain to have correct information about cheese,” including the story of how the cheese came about and what the cheesemaker’s intentions were when making the cheese. “Everyone in the supply chain benefits by having this information,” he said, and “the more information the better”—like how retailers can best sell it and the back story of the cheese. At the end of the session, a retailer in the audience asked panelists for advice on how to get her staff to know the story: “Personally,” she said. “I love the story.” She wanted to know if it was reasonable to ask cheesemakers for pictures

or handouts about the farm and cheesemaking process. Cheesemakers on the panel supported this, and suggested that, while the story is important, it also useful to have some “boiled-down content” or “talking points,” especially for new retailers.

Furthermore, a panelist representing the Vermont producer, Cellars at Jasper Hill, suggested that in-store demos offer a unique opportunity for cheesemakers to talk to cheese retail staff about their products, their stories, and to educate about cheese more generally. Just as important, cheesemongers can listen to how cheesemakers talk to customers about their cheese. Speaking more generally, the Wisconsin cheesemaker offered this advice to retailers in the audience: “If a cheesemaker offers you the opportunity to get education on cheese you’re selling, take it.” It makes sense that for cheesemongers to be able to convey the story to consumers in a way that accurately represents cheesemakers’ values and intentions they must somehow learn this specialized knowledge from the cheesemaker directly.

Arguably the best way for cheesemongers to learn the story behind cheese is to physically go to the source. Deep, experiential knowledge cannot be acquired by reading promotional materials or even by talking to producers on the phone or at the store. As I demonstrate in the next section, more than just an educational opportunity, “cheese trips” to the place of production encourage the development and maintenance of strong relationships between retailers and producers, contribute to cheesemongers’ professional identity, and enhance their ability to assure and communicate sensory quality.

Cheese Trips

On Formaggio Kitchen’s website, a page entitled “Travelogues” features a picture of Ayrshire cows with the caption: “We make regular trips throughout Vermont and

Jasper Hill is one of our favorite stops.” Out of five featured places on the Domestic Travels page, three were Vermont cheesemakers—Cellars at Jasper Hill, Consider Bardwell Farm, and Twig Farm. As the domestic cheese buyer, Trent is frequently the person making these trips. While customers are the top priority on a day-to-day basis at the store, Trent was not shy to say his favorite part of the job is working with producers. In fact, he first realized his passion for being a cheesemonger when he accompanied the previous domestic cheese buyer on a trip to a small farmstead cheesemaker in Vermont.

Trent described this first cheese trip—his first direct exposure to cheesemaking—to me in detail. They left Boston in the early hours of the morning in order to arrive at the farm in time for the morning milking at around 5:00AM: “So we got there, watched him milk ... we’re sitting on the sidelines basically, just watching for about an hour and a half. Finally all the goats are milked and then he starts talking to us.” They went in for breakfast—homemade granola with warm goat’s milk: “I saw him milk a goat, like he has a pan of milk—hand-milked, fresh, warm goat’s milk.” Here, Trent’s experiential knowledge gives new meaning to the phrase “knowing where your food comes from.” More than just “sitting on the sidelines,” Trent and his colleague accompanied and assisted the cheesemaker with daily tasks like taking the goats for a walk around the property, helping with yard work, and doing some general cleaning for a couple of hours before coming back into the house for lunch—grilled cheese sandwiches, another farmstead-to-plate experience. Overall, Trent spoke of this first cheese trip with a strong sense of nostalgia: “That’s when I finally realized what a cheese crush was.” Trent’s deep passion, not only for cheese but for where cheese comes from, is clearly related to his firsthand experience with the unique landscape and taskscape of artisan cheese.

As evidenced by this, cheese trips appear to have several important functions related to story. First, they are a way to obtain specialized knowledge directly from producers. Cheesemongers learn about a particular cheesemaker and his/her operation by meeting the producer and animals, watching the cheesemaking process, and experiencing the production context firsthand. In this way, cheese trips resemble what is commonly referred to in the retail sector as “farm tours” or “farm visits.” For example, a retailer-panelist from San Francisco at the ACS conference emphasized the importance of employees at her store going on a “farm tour” once a month: “There’s nothing more valuable than meeting a producer, going out to the land,” she said. “It gives a depth to what we’re doing.” Thus, cheese trips help cheesemongers to experience *terroir* and to forge a strong personal connection to place that would not be possible simply from reading sales materials or observing an in-store demo with the cheesemaker.

This kind of experiential education is nicely described by San Francisco cheesemonger Gordon Edgar, who writes about his “2006 East Coast Cheese Tour” on a website page entitled “Cheese Trips.” The tour included visits to four Vermont cheesemakers whose cheese he both sells and admires. For instance, he wrote in one blog post: “Ever since I started carrying their cheese I’ve wanted to visit Jasper Hill Farm. For me, it was probably the biggest attraction of the trip because they are becoming some of the best cheesemakers in the country.” In recounting his experience at Jasper Hill, he incorporates elements of the cheese story related to the cheesemakers—brothers Mateo and Andy Kehler—and their families, as well as the animals: “All cheeses are made with raw milk on the farm from their herd of 36 Ayreshire [sic] cows. They were sweet-tempered, huge, and drippy.” Here, evidence of his personalized knowledge of the farm

and animals helps authenticate his experience and final conclusion: “Production doesn’t get much more small-scale and craft oriented than this.” Edgar’s recap also demonstrates how visiting the place of production can enable cheesemongers to gain a new, or deeper, appreciation for cheesemakers and the values, or sentiments, that underlie their work:

Any cheesemonger or vendor can come visit a cheesemaker and cut some curds or flip a few cheeses. It is a great feeling to be part, even for a few hours, of that maturation process, of creating something edible, let alone something amazing like the Jasper Hill cheese. It’s something else entirely working from 5 AM – 7 PM almost everyday of the year. The Jasper Hill folks definitely hold onto their sense of creation, love of their craft, and the beauty of their land. It’s obvious just spending a few minutes with them.

By enabling retailers to gain experience with and appreciation for the cheesemaking process while being careful not to romanticize it—“If anyone out there still has fantasies about the joys of rural living seeing how hard farmers actually work will probably cure you”—cheese trips help to build trust, respect, and relations of regard.

Clearly, then, a third function of cheese trips is to build and maintain strong social relationships between retailers and producers. These visits are rife with formal and informal conversations, and typically involve sharing a meal, like Trent’s breakfast at the cheesemaker’s home. Similarly, Edgar describes eating dinner and drinking wine with the producers he visited—even staying overnight at a few of their houses rather than in a hotel. Another stop on the Vermont leg of his tour, Vermont Butter and Cheese Company (now Vermont Creamery), was less about the production context and animals than the human relationships. Writing about the co-owner and renowned forerunner of the American artisanal cheese movement, Allison Hooper, he underscores the importance of these trips for maintaining social relationships: “One of the nicest parts of the entire trip

was just sitting around in her office after the tour of her new facility chatting about cheese and conferences past.”

Similarly, from Trent’s perspective, cheese trips allow him to visit nice and interesting people—many that he now considers his friends—thereby mixing business with pleasure. More than a perk of the job, though, he believes it is important for the staff at cheese shops to “know their producers of cheese intimately.” On the day that we had a more formal conversation over lunch, he demonstrated the vast knowledge he has acquired about Vermont cheesemakers over the years of working behind the cheese counter. Using the restaurant menu as a proxy for a map of Vermont, he pointed toward the northeast corner: “Let’s start here at Bonnieview Farm.” A couple hours later we had traveled down the entire state through stories; from stories about a producer’s history—e.g., when they came to Vermont, how and why they decided to start making cheese, etc.—to more personalized anecdotes from cheese trips or past ACS conferences.

In addition to helping sustain ongoing social relationships with cheesemakers, cheese trips provide cheesemongers an opportunity to discover new cheeses and build new relationships with producers. For example, one time while in Vermont Trent read an article in a local magazine about two sisters making cheese in Stowe, VT. He contacted one of the women and asked her if he could try her cheese. They were only selling at a couple of farmers’ markets at the time, but he loved it and, soon after, Formaggio Kitchen began selling it. This serendipitous discovery is a far cry from the usual process cheesemakers go through to get their cheese into a retail outlet—sending faceless samples, or, even more anonymously, selling to a distributor who then gets the cheese to retailers. It also demonstrates the potentially powerful influence of an individual retailer

in deciding which cheese is carried by the store and, therefore, which cheese becomes *known* by regional consumers.

While farm visits and cheese tours seem to be valued among cheesemongers for their ability to forge connections to places and to people, the cheese trips I learned about at Formaggio Kitchen are distinct in at least one regard: they serve an additional function of transport. Transporting cheese directly from the place of production to the store has several advantages. On a practical level, by driving to Vermont, stocking the car with wheels of cheese, and transporting them back down to the store, cheesemakers and cheesemongers are able to avoid expensive shipping costs and the use of middlemen.

Cheese trips also carry the potential for advantages in taste. Consider the case of Cabot Clothbound Cheddar. Trent travels to the producer, Cellars at Jasper Hill, in Greensboro, VT every few months to sample the different wheels and select the ones he wants for the store. In contrast to other stores that carry Cabot Clothbound, which receive the cheese sealed in Cryovac plastic, Formaggio Kitchen's wheels are allowed to remain wrapped in cloth. One monger, Jenna, told me that the difference this imparts in taste is "amazing." This emerged from a conversation with a customer who was looking for "something sharp." Jenna recommended Cabot Clothbound as her "favorite cheddar":

I'm sure you've heard of Cabot before... but for this cheese Cabot sources their milk from specific cows. It's aged up at Jasper Hill. Trent goes up and tastes the wheels and selects – we definitely look for a particular taste.

Beyond telling the story and authenticating the cheese, this personalized anecdote directly ties the highly social cheese trip to a superior sensory profile. Recall that this element of being "hand-picked" by the cheesemonger is noted on the cheese's sign (Figure 4), which is bigger than the other signs and in color, and that Cabot Clothbound is not only their

best-selling Vermont cheese but their best-selling domestic cheese “hands down”. Thus, occasional cheese trips have a significant influence on cheesemongers’ ability to ensure and communicate sensory quality and, ultimately, shape consumer preference.

Conclusion

These stories from behind the cheese counter confirmed that the sensory quality of Vermont artisan cheese is intimately connected to both landscapes (Hinrichs, 1996)—the place where the cheese was made—and taskscapes (Ingold, 1993)—the practices or activities in that place. In this way, Vermont artisan cheese is a “good food” (Sage, 2003); it has organoleptic properties (e.g., flavor, smell, texture) that give it distinction; an “ecologically embedded” character “defined by its locality of origin ... and its methods of production”; and socially embedded features related to its “scale of production” and “distribution through short food supply chains” (p. 50). This conception of sensory quality as relying on a mixture of sensory stimuli and social information requires special attention to communication. According to Trubek (2008): “In the end, these sensory objects, the handiwork of various people and places ... must always jostle for attention in the global marketplace, made knowable somehow, whether by individuals, organizations, or governments” (p. 243). This research involved an attempt to better understand how certain individuals—cheesemongers—make Vermont artisan cheese knowable to consumers.

Confirming previous research, it was found that the main vehicle for communicating the unique social circumstances of Vermont artisan cheese—where and how it is produced—is the specialized narrative known as a cheese story (Reed & Bruhn, 2003; Roberts et al., 2008; Paxson, 2013). According to Paxson (2013), cheese stories

allow producers to inform consumers about their social values and practices. This reflects the concept of a short food supply chain, in which embedded qualities— what Murdoch et al. (2000) refer to as the “traces” of the production locale (p. 117)—are communicated to consumers so that they are able to “confidently make connections and associations with the place/space of production *and, potentially, the values of the people involved and the production methods employed*” (Marsden et al., 2000, p. 425, emphasis in original). Indeed, Paxson (2013) suggests that cheese stories allow consumers to understand not only the physical context of production, but also the social and moral values of producers.

Two types of short food supply chains emerged as relevant to this research. First, *spatial proximity* supply chains, where (a) products are retailed within the region of production and consumers are made aware of the ‘local’ nature of the product at the point of retail (recall that Vermont cheese was perceived and promoted by cheesemongers as local), and (b) retailers are “accorded an expertise or regard for their association with the product, and may be further legitimized by acting as mediators for the producers themselves” (Sage, 2003, p. 49). Second, *spatially extended* supply chains, where value and meaning-laden information about the place of production is transmitted to consumers who are outside the region of production and may have no personal experience or knowledge of that region. Particularly in these spatially extended supply chains, cheesemongers play a key role for producers in ensuring that consumers receive and understand this value and meaning-laden information, which is especially important due to artisan cheese’s status as an unfinished commodity (Paxson, 2013).

By conveying the cheese story, then, cheesemongers act not only as proxies for producers, but also as *merchant bridges* (Appadurai, 1986) that help to close the gaps in

knowledge between producers and consumers. This exchange of knowledge is an important part of what gives Vermont artisan cheese meaning to consumers. McCracken (1988) posits that the meaning carried by goods is “constantly in transit ... flowing to and from its several locations in the social world, aided by the collective and individual efforts of designers, producers, advertisers, and consumers” (p. 71). While the annual ACS conference represents one such collective effort to create, negotiate, and influence the flow of meaning around artisan cheese, the individual efforts of cheesemongers are critical for transferring meaning from the product to the consumer on the ground through everyday practices, conversations, and exchange rituals (Roberts et al., 2008).

While transferring meaning, cheesemongers have the unique ability to actually shape consumer sensory experience and preference. A common practice in traditional cheese shops is tasting the cheese. When cheese tastings are combined with telling the story, the consumer’s sensory experience quite literally becomes social experience. In this way the cheese story is more than marketing; it is a way to connect consumers to a place and help them understand—and taste—the producers’ values and intentions. These interactions between cheesemongers and consumers reflect Trubek’s (2008) notion of a “shared dialogue” for discerning taste, and what Shapin (2012) refers to as *intersubjectivity*, or the collaborative effort of “taste communities.” It also supports Hennion’s (2007) view of taste as co-produced and a social activity—not simply an attribute or property of the cheese. Thus, this research contributes valuable insight into how taste and preference are shaped and shared in practice.

The view that the cheesemonger profession requires not just sensory training, but also specialized social knowledge became most clear on my last day at the ACS

conference at a panel session entitled “Educating for Passion: Developing Cheesemongers for Life.” The moderator of the session began by saying: “There seems to be a prominent issue in the cheese world finding people who can really represent cheesemakers well and convey their story.” Despite this impassioned plea for knowing and communicating the story, some in the field still clearly remain skeptical. In particular, there seems to be an uneasiness felt by some in the retail sector who worry that the story is prioritized over the sensory modality to the detriment of overall quality. While cheesemongers appear to agree that a certain level of intrinsic quality is necessary for consumer acceptance and preference, many also see the importance of—and derive pleasure from—knowing and conveying the social story, and perceive this to be an important part of their professional role and identity.

Before this research we knew little about how cheesemongers obtain this specialized information and social story. Cheese trips—visiting farms or cheesemaking facilities—emerged as one way that the cheesemongers at Formaggio Kitchen learn the story and gain experiential knowledge of place. These trips are also important for building and maintaining strong social relationships with producers, through meeting and conversing face-to-face, participating in the cheesemaking process, and sharing meals together. In this way, cheesemongers’ specialized knowledge is derived from the social physical, and sensory experience of *place as context*, defined by Sack (1988) as the place where the realms of nature, social relations, and meaning come together.

A strong commitment to understanding, appreciating, and communicating place is not unique to Formaggio Kitchen and may be related to broader social movements surrounding local and alternative food systems in the U.S. and abroad. For example, at

the ACS conference, cheesemongers from Wisconsin and France both referred to their tendencies to look locally, or regionally, first. According to the French cheesemonger: “It’s always been true in France that we eat what we make locally. This tendency these days is being reinforced by localvore movements.” In contrast, a cheesemonger from the famed Neal’s Yard Dairy in London noted: “In the U.K., local is a funny concept. Place doesn’t matter as much. Is it good? That should be enough.” Yet, at least in Vermont and around the U.S., there appear to be clear connections between burgeoning local food movements and the rising popularity of artisan cheese among consumers. Both Trubek (2008) and Aylward (2008) recognize the trend of consumers becoming more engaged and discerning when it comes to their foods’ origins. Increasingly, place *does* matter.

Importantly, however, the food philosophy espoused by Trubek (2008), and demonstrated by the cheesemongers and customers at Formaggio Kitchen, is not an argument for proximity; rather than being about distance *from* a place, it is about specialized knowledge *of* a place—in other words, food that is locally-based, but not necessarily local. Hinrichs (2000) warns about the conflation of spatial and social values, and points out that the social embeddedness of local food has little to do with spatial relations. Indeed, as Odessa Piper suggested on day one of the conference, local is often used as a code for other values of appreciation, such as knowing the producer and tasting the place (*terroir*). Thus, it appears that it is the social, place-based values of food that are most important to actors in these alternative food systems. As Paxson (2006) puts it: “The values that make artisan cheeses taste ‘good’ are related to those values that make such cheese ‘good’ to make” (p. 203). In a similar vein, Lee (2000) offers the following way of thinking about how social and spatial relations interact to create complex networks:

Collaboration between producers and consumers create economic geographies of regard founded on mutual interests and knowledge. It is this that has ... facilitated a distinctive world of production founded on complex relationships between producers and consumers. A space is thereby maintained for the production of use values by specialised producers. (p. 155)

While Lee and Paxson highlight the shared values and mutual interests and knowledge of producers and consumers, this research project suggest that cheesemongers also form complex relationships with producers and consumers, thereby creating economic geographies of regard. The same values that make artisan cheese “good” to eat and make, also make it good to sell. Thinking of this as a social network allows us to better understand how actors in this system are not purely economic actors, but people who are interested in an alternative system of food production.

Summary

My experience participating and observing alongside retailers and producers at the ACS conference and behind the cheese counter at Formaggio Kitchen provided invaluable information about both the theory and practice of the cheesemonger profession. This chapter provided a thick narrative description of how cheesemongers’ specialized knowledge of the place of Vermont artisan cheese is socially influenced, acquired, and communicated to consumers in practice, and how this shapes sensory preference.

Cheesemongers play an important role for producers by both ensuring and communicating sensory quality as it relates to both intrinsic and extrinsic qualities. With regard to intrinsic qualities, cheesemongers’ responsibility to the physical integrity of the cheese is interpreted as a way to respect cheesemakers’ hard work and craftsmanship and to honor their intentions. In addition to proper food safety and storage practices, retailers

must frequently taste the cheeses they sell so that they can understand variations in flavor, smell and texture and be able to communicate about them to consumers. This is crucial not only for their ability to give recommendations, but also for the shared dialogue and knowledge that comprises an important part of consumers' sensory experience. With regard to extrinsic qualities, this chapter illustrated in great detail how cheesemongers convey specialized social information through cheese stories. Whether directly through conversation or indirectly through in-store signage, telling the cheese story is a way for cheesemongers to share knowledge and shape preference.

A key finding was the discovery of “cheese trips.” Cheese trips represent flows of both material goods—cheese—and immaterial goods, such as specialized information, experiential knowledge, relations of regard, and story. In addition to the logistical, economic, and sensory advantages, this practice of traveling to the farm or creamery builds firsthand knowledge and experience of the production context, therefore making the cheesemonger better able to represent the cheesemaker, communicate the story, and ground consumers in a concept of authenticity. Moreover, for the increasing numbers of consumers who desire to “know their farmer” and where their food comes from, knowing a retailer who has a strong relationship with the cheesemaker is the next best thing. Just one step removed, they may get satisfaction from the fact that the person they buy food from knows the person who made that food.

However, while previous research on artisan cheese retailers has focused on their relationships and interactions with consumers (Roberts et al., 2008), little is known about their relationships with cheesemakers. Social network analysis offers a way to examine and explore these relationships. Moreover, given that “[s]ocial networks affect the flow

and quality of information” (Granovetter, 2005, p. 33), they are important to this study. In the next two chapters, I explore how the techniques associated with social network analysis can further expand our understanding of this complex topic.

CHAPTER FIVE

RESEARCH METHODS II: SOCIAL NETWORK ANALYSIS

In the previous chapter the importance of strong social relationships throughout the artisan cheese supply chain emerged from both sites of qualitative research. Through ethnographic fieldwork it became evident that cheesemakers and cheesemongers see themselves on the same team, bound together by shared goals and values. These shared values lay the foundation for social relationships, which in turn form the basis for a social network. This chapter describes the methods for the social network analysis (SNA).

SNA was selected for use in this study for its ability to provide insight into the social structure of the regional Vermont artisan cheese producer-retailer network. According to Scott (2000), rather than a “specific body of formal or substantive social theory,” SNA is an “orientation towards the social world that inheres a particular set of *methods*” (p. 37). Thus, whereas ethnography provided a valuable depth of knowledge to my understanding of cheesemongers and their role in the Vermont artisan cheese network, SNA provided significant breadth by allowing the examination of the structure of social relationships between Vermont cheesemakers and regional retailers, as well as “the patterns and implications of these relationships” (Wasserman & Faust, 1994, p. 3).

The primary objectives of the SNA were: (1) to gauge Vermont cheesemakers’ perceptions of which retailers sell their cheese in the broader geographic region (New England and New York); (2) to identify key actors (cheesemakers and retailers) in the network; (3) to identify areas of strength, as well as obstacles, in the network; and (4) to better understand the different types of relationships between Vermont cheesemakers and regional retailers and leverage knowledge of these ties to influence policy.

Target Population

In this phase of the research, which integrated survey and network analysis techniques, we broadened our focus from cheesemongers to retailers. As previously defined, cheesemongers are highly specialized retail professionals who buy, promote, and sell cheese. Because there is no official source of data on cheesemongers, determining who and who is not a cheesemonger is difficult and somewhat subjective. From the perspective of those on the ground, it is not as simple as working in the cheese department of a store; other important factors include knowledge, skill, expertise, and experience. Also, there is not necessarily a cheese department or cheesemonger at each retail venue that sells Vermont artisan cheese. Retail venues include specialty food stores and cheese shops, food co-operatives, independent groceries, general stores, and national supermarket chains—all of which may or may not have designated cheese professionals on staff. Consequently, for the SNA we opted to use the broader concept of *retailer* to indicate any store that sells Vermont artisan cheese.

Before we could examine the relationships between retailers and cheesemakers we had to determine what approach to take in order to collect the necessary relational data, which included deciding who to survey and defining the network boundaries. According to Scott (2000): “[T]he determination of network boundaries is not simply a matter of identifying the apparently natural or obvious boundaries of the situation under investigation”; rather, it is “the outcome of a theoretically informed decision about what is *significant* in the situation under investigation” (54). We chose to survey Vermont cheesemakers based on two reasons. First, an official list of Vermont cheesemakers and their contact information was readily available, whereas a complete list of retailers who

sell Vermont artisan cheese was not. Second, the number of Vermont cheesemakers (less than 50) is much smaller than the number of potential Vermont artisan cheese retailers in New England and New York, making the task of following-up more manageable.

Network boundaries were determined to include any retailer located in New England or New York that is identified by a Vermont artisan cheesemaker as selling their cheese.

Data Collection

In order to collect the relational data needed to map structural relationships between Vermont cheesemakers and regional retailers, I designed an online questionnaire and distributed it to every licensed artisan cheesemaker in Vermont. I relied on two sources to obtain the names and e-mail addresses of cheesemakers: the Vermont Cheese Council website, which contains information on its approximately 45 members (www.vtcheese.com/cheesemakers.htm), and the Vermont Agency of Agriculture, which supplied me with a list of all licensed cheesemakers in Vermont (as of 9/12/2013).

Questionnaire Design & Content

I used the online survey software tool SurveyGizmo to design the questionnaire, which had four main sections. Section I, *Introduction and Informed Consent*, provided detailed information about the study, its purpose, potential risks and benefits, compensation, and confidentiality. Participants were incentivized with a raffle for three \$100 gift cards to a Vermont restaurant of their choice. Only those who identified their business name could be entered into the raffle; participants were assured, however, that survey responses would be kept confidential. At the end of the section, an acknowledgement of informed consent was required to proceed to the rest of the survey (this was the only required question on the entire survey).

In Section II, *Demographics*, respondents were asked a series of eight demographic questions regarding their cheesemaking operation, including their company's name, how long they have been a certified cheesemaker in Vermont, what style(s) of cheese they produce, total volume of product sold last year, total sales last year, and number of employees (see Appendix for a copy of the survey instrument).

In Section III of the questionnaire, *Retailer Checklist*, respondents were provided a checklist of cheese retailers, organized by state, and instructed to identify any retailer that had sold their cheese in the past year (365 days). To create this list I relied on an online directory of cheese retailers maintained by *Culture Magazine* (http://culturecheesemag.com/cheese_stores), which is self-proclaimed as “the most comprehensive—and perhaps the only—national cheese shop directory you will come across,” and which was informally confirmed by one Vermont cheesemaker as being a reliable, albeit informal, source of this data. Since the directory is organized by state, I was able to search for and create a list of potential Vermont artisan cheese retailers within my region of interest (i.e., New England—CT, MA, ME, NH, RI, VT—and New York). Chain stores, defined as having more than three locations in a state, were grouped into one item (e.g., “Whole Foods, multiple locations, MA”). I complemented this list with a smaller, more locally-based directory compiled by the Vermont Cheese Council (<http://www.vtcheese.com/wheretobuy.htm>), which identifies several in-state retailers as well as a handful of regional stores. Finally, I provided an “Other” option to allow respondents to identify additional retailers that sell their cheese in these states. Respondents could list up to five additional retailers per state. In this way, the questionnaire was designed to gain as complete a picture as possible of the network.

After identifying retailers in all seven states, respondents proceeded to the final section of the questionnaire (IV), *Retailer-Specific Questions*, which featured a series of questions for each retailer selected on the previous section's checklist. In this way, the survey's length varied based on how many retailers a respondent selected from the checklist. Thus, the first set of questions asked about the first retailer selected on the checklist. After pushing the "Next" button, the same set of questions would appear with the name of the second selected retailer. This survey design technique, which allows you to repeat previously collected data later in the survey, is referred to as *piping*.

The retailer-specific questions were designed to capture more detailed information about that particular relationship, including context, content, and process. Examples include: "How did your cheese come to be sold at [retailer name]?" "Do you share information with cheesemongers at [retailer name]?" "Have you ever met cheesemongers at [retailer name]?" and "How many times, if ever, have you visited [retailer name]?" (see Appendix for complete list). Respondents were also asked to report the name of their main point of contact at that retail venue, if they knew it. Aside from being an indirect indicator of the strength of the relationship, this name-generating question was included so that we had the option of going back to these individuals in order to verify the relationship. Finally, respondents were encouraged to use an open-text field "to clarify or elaborate on a response, or provide any additional comments or details that you feel are relevant to your relationship with cheesemongers at [retailer name] and may help us to better understand this relationship." After completing this same set of questions for each retailer identified on the checklist, respondents were directed to the final *Thank You* page.

Follow-up Procedures

In the initial e-mail requesting their participation in the survey, cheesemakers were asked to complete the questionnaire within a month. Reminder e-mails were sent on a weekly basis. At the end of the month, I followed up with phone calls. The total duration of time from when the survey was distributed until the last survey was received was approximately two months.

Data Cleaning, Pruning & Exclusion

Once the survey had closed, data collected in SurveyGizmo were exported to Microsoft Excel spreadsheets for cleaning and pruning. With one exception, all respondents identified their company name in the *Demographics* section, which allowed us to check for duplicate responses. Four cheesemakers had duplicate responses. In the case of one cheesemaker, who had two nearly identical responses, one more complete than the other, we kept the more complete one and excluded the other. In each of the other three cases, information was spread between responses (either two or three duplicate responses) and not one response appeared to be more complete than the other(s), so we combined the duplicates to create one new response for each.

Four cheesemakers' responses were excluded from the analysis. We excluded one based on knowledge that it was a new company that had not sold any cheese at the time of the survey. Another was excluded based on the knowledge that, although they are an important and well-recognized cheese company in Vermont, they make only one *artisanal* cheese, which is aged, marketed, and sold by another Vermont cheesemaker. Thus, this particular cheese was accounted for in the other cheesemaker's response. The final two exclusions were decided on the basis of erroneous data. Both completed the

demographic questions but stopped before the retailer checklist, suggesting they did not have ties to any retailers. During follow-up phone calls they indicated that they do have retailer ties but never went back to the survey to complete the section.

Three cheesemakers' responses were considered for exclusion but were verified in some way to warrant their inclusion. One cheesemaker (Respondent 71) did not identify its company name or fill out any of the demographic questions, but selected two retailers on the checklist. Our initial concern was that this could be a duplicate response (i.e., a cheesemaker may have started the survey, stopped before completing, and then opened a new one at a later date). However, we decided that it was a valid response based on the fact that the original survey export had a unique IP address, i.e., one that did not match any other entry (all the previous responses that we deemed as duplicates had the same IP address for both entries). There is a chance that Respondent 71 was a duplicate and used a computer on a different network (e.g., a library computer); however, it is a common practice among network studies to use IP address as an indicator despite this limitation. Moreover, from a theoretical perspective, the response pattern was feasible. Respondent 71 checked two retailers in Vermont, which was the last state on the checklist, suggesting that he/she at least glanced over the other states. Other respondents also indicated connections with only one or two retailers in Vermont, and, because we had their company names, we were able to verify their responses during follow-up phone calls.

Two others required further validation but were ultimately deemed legitimate and valid. Respondent 78 indicated one tie—an on-site retail store written in as an "Other." During a follow-up phone call, I was told that they also use a regional distributor, and while they have a list of *potential* retail locations (provided by the distributor) they do not

know precisely which stores their cheese is or has been sold. In a similar situation, Respondent 32 selected only one retailer (in Vermont) and wrote in the name of a distributor as an “Other.” I later verified that he did not know which stores his cheese was sold in through the distributor. Thus, what initially looked like inaccurate or incomplete responses were verified to accurately reflect these cheesemakers’ knowledge.

These two cases bring up an important pattern that emerged during data collection regarding cheesemakers’ use of distributors and how that influences their knowledge of retailer ties. The purpose of this study was to better understand social ties between cheesemakers and retailers. If a cheesemaker is not aware that they are connected to a retailer, a social tie cannot exist. In this way, we distinguish between a *social network* and a *sales network*. As such, while the SNA results do not give us a complete picture of cheesemaker-retailer sales ties, they do give us a picture of cheesemakers’ social ties.

As a final indicator, we examined the software program’s system of flags for partial and complete responses. A *complete* flag indicates that the respondent clicked through to the end of the survey and reached the final *Thank You* page. A *partial* flag indicates that the respondent clicked the Next button on at least the first page but stopped before reaching the *Thank You* page. The three verified cases above were flagged as complete, whereas Respondent 74, who we excluded, was flagged as partial. Thus, through investigation and follow-up questions, we thoroughly verified the data. This kind of piecemeal verification is justifiable and standard in social and network science.

Limitations of Survey

The survey had a few limitations. First, at a methodological level, the decision to survey cheesemakers, instead of retailers or both, means that the relational data collected

only reflect cheesemakers' perceptions of relationships. This decision was based in large part on the fact that a complete and relatively short list of Vermont cheesemakers is readily available, whereas a complete list of retailers who sell Vermont cheese does not exist, and a list of those who *might* sell Vermont cheese is vast in number and probably still incomplete. By privileging cheesemakers' knowledge, and essentially following the direction of flow of cheese in the supply chain, we were able to create the network from the bottom-up, but it means that the data are directed (i.e., going in one direction from cheesemaker to retailer). As we were only interested in the presence or absence of a relationship—not direction—this is not a crucial issue because it is acceptable to treat directed data as if they were undirected (Scott, 2000). The bigger limitation points to the possibility that the network structure would have looked very different if we had chosen to survey retailers instead. In this way, “the social network studied may be an imperfect representation of the social network” (Scott, 2000, p. 54).

With regard to survey design, three unexpected weaknesses emerged. First, a few cheesemakers may have experienced a ceiling effect when identifying “Other” retailers, utilizing all five write-in spaces for a given state. Since we have no way of knowing whether they would have added more had there been additional space, or how many more they would have added, it is likely that some cheesemakers' ties may be underestimated. Moreover, a few cheesemakers identified non-traditional retailers such as restaurants, online retailers, farmers' markets, as well as farm stands and CSAs operated by other farms. We could not have predicted that some respondents would consider these to be retailers, and it is likely that many others did not think to list restaurants or atypical venues since the study's stated focus was on cheesemongers and traditional retail stores.

As Scott (2000) points out, findings from SNA are not always straightforward because: “Social relations are social constructs, produced on the basis of the definitions of the situation made by group members” (53). However, we should recognize that a variety of alternative markets and venues exist for getting cheese to consumers, and that these are viewed as important retail outlets by some Vermont cheesemakers. For this reason, we decided to include them in the analysis.

A second limitation of the survey design has to do with its length and potential for respondent fatigue. Especially among those cheesemakers who checked off a relatively high number of retailers, it was common to see survey responses drop off before completing, or in some cases even starting the final section (Section IV). In several cases, the respondent completed the set of retailer-specific questions for the first retailer, or the first few retailers, and then stopped, likely after realizing how much time would be required to finish. One cheesemaker who stopped after the first set of retailer-specific questions wrote to me: “This survey is too long. I do not have the time to do it.” Another who completed the questions for four of his fourteen selected retailers e-mailed me this apology: “I am sorry, your survey is too long. I tried, but it kept on going.” In these and other cases, survey responses were saved by the software program but flagged as partial.

As a result of this emergent pattern of partial responses due to respondent burden, I altered my expectations and subsequent strategy during the follow-up period. Since we were not compensating cheesemakers for their time, I could not expect them to spend upwards of an hour answering these questions. Instead of aiming for completed surveys, then, I focused on getting as many cheesemakers as possible to fill out the survey through the retailer checklist (Section III). That way, we could still get robust data on the

structure of the network, even if we would not learn as much about the *content* and *processes* of the network relationships. For those respondents that did complete the entire survey, the retailer-specific data were still valuable for adding depth, demonstrating nuance, and letting individual cheesemaker's voices come through.

The final flaw of the survey has to do with distributors. The survey was designed with the knowledge that distributors are playing a key role in the U.S. artisan cheese supply chain thanks to previous market research (Sakovitz-Dale, 2006) and my ethnographic fieldwork at the ACS conference. A question about distributors was thus included as part of the retailer-specific questions in Section IV. For each retailer, cheesemakers were asked: "Do you use a distributor to get your cheese to [retailer name]?" If they answered "yes," another question appeared: "What is the name of distributor?" However, as just discussed, an unforeseen problem was that the majority of respondents did not complete—or sometimes even begin—this final section of retailer-specific questions. Consequently, with regard to cheesemakers who only completed the checklist, there was no way to know whether they were going through a distributor or they were selling directly to the retailers they had selected. This became a particularly important issue to tackle after learning that some cheesemakers were not aware of their retailer connections due to the fact that they use a distributor. By taking on an additional set of data collection to address this problem, described next, we were better able to account for the presence of distributors in the network, thereby providing a more complete and nuanced view of the regional supply network for Vermont artisan cheese.

Follow-up Questions about Distributors

In an effort to gain a more complete picture of the intermediary role of distributors between producers and retailers, I used phone calls and e-mails to ask cheesemakers who had completed the survey through the retailer checklist two questions:

(1) Do you use any distributors to get your cheese to retail stores in New England and New York? If yes, which one(s)?

(2) Do you sell directly to any retail stores (i.e., not go through a distributor)? If yes, which one(s)?

Scale-related burden once again emerged as an obstacle. Since most cheesemakers only use a few distributors, they were able to easily identify them. On the second question, however, a pattern arose. Cheesemakers who only sold directly to a handful of stores readily listed off their names. Others initially responded that their list of direct retail sales was very long, and as such was either impossible to recall or recite at that time, or was simply too time-consuming and inconvenient. Upon following up with these cheesemakers a few weeks later, I was able to collect a list of names from all but five; a few cheesemakers were not willing to share names, regardless of quantity. For these cases, I was still able to record the number of direct retail ties. Thus, these five cheesemakers were excluded from any network analyses that used direct retailer data (in network analysis knowing names of ties is important) but retained for statistical analyses (where simply knowing the number of ties is sufficient).

In cleaning the data on distributors and direct retail ties, we excluded two cheesemakers due to missing data. I had no contact information for Respondent 71, as their survey response was anonymous, and my attempt to contact Respondent 26 was unsuccessful. (We retained both for analysis of the original survey network data). We

also excluded any retailers that were found to be located outside of the study's geographic region of interest (e.g., California, Georgia, Minnesota). Moreover, recognizing that some distributors have a national reach while others remain limited to a region of one or several states, we excluded any distributors that we could not verify as distributing to retail outlets in New England/New York. In some cases, retailers that had been identified on the survey instrument were not mentioned in the follow-up data as a direct tie. This may be because it is a retailer that the cheesemaker knows sells its cheese but uses a distributor to get to it. The reverse situation, in which retailers that were mentioned during follow-up were not identified on the survey, was also true for a small number of cases. Despite the potential for these kinds of discrepancies, we believe that using data collected through the survey instrument as well as data collected through the follow-up procedures creates a more complete and accurate picture of the social network.

After verifying and cleaning the follow-up data, I manually entered the names of all distributors and new retailers into spreadsheets. In order to classify retailers and distributors, I conducted Internet research on company websites, social media pages, and other relevant websites to collect information about each store or company, its location, what kinds of products it sells/distributes, etc. Because no demographic information existed for retailers besides name and location, I utilized primary (retailers' websites, social media pages, etc.) and secondary (customer reviews, news articles, etc.) sources on the Internet in order to categorize them by store type. By analyzing mission statements, store history/informational, and types of food and non-food products sold, I classified retailers as one of eleven store types: co-operative, natural/health food store, gourmet/cheese shop, independent grocery, general/country store, convenience store,

chain food markets (regional and national), restaurants, farm stores/farm stands, and other (miscellaneous). Finally, I assigned each cheesemaker, retailer, and distributor a unique code to protect confidentiality.

Data Analysis

I used statistical analysis and social network analysis to analyze the data. SPSS Statistics software was used to calculate descriptive statistics and frequencies for responses to cheesemaker demographic questions (Section II) and retailer-specific questions (Section IV). For the retailer checklist (Section III) and the follow-up network data on distributors and direct retailers, the social network analysis software, ORA (Carley, 2001-2011), was used to run network analyses, calculate basic descriptive measures (e.g., centrality, density), and create visuals (i.e., network maps or graphs). Importantly, Scott (2000) notes: “While it is, of course, possible to undertake quantitative and statistical counts of relations, network analysis consists of a body of *qualitative* measures of network structure” (p. 3, emphasis added).

Social Network Analysis

It is important to recognize that the theoretical basis for network analysis is built on the assumption that you have an exact and complete population (i.e., knowledge on every actor and every link). In practice, however, researchers rarely have a complete network; there are usually missing links, and knowledge about links may represent perceptions, as was the case in this study. In spite of this, the tools of network analysis are still useful for researchers because they are capable of showing us things that we would not otherwise be able to see. In particular, even when we do not have complete

information on every node and link, we can gain interesting insights through SNA by examining emergent patterns.

In order to utilize SNA software, we first created a data matrix for each network that we examined which recorded the existence of a relationship (or a tie). For instance, for the cheesemaker-retailer network, we created a rectangular, or “incidence,” matrix, in which each row was a cheesemaker and each column was a retailer. The presence or absence of a tie between a particular cheesemaker and a particular retailer was represented by a ‘1’ or ‘0’ in the appropriate cell of the matrix. Matrices were also created for the cheesemaker-distributor network (each column was a distributor) and cheesemaker-direct retailer network (each column was a retailer that cheesemakers identified as selling directly to). Thus, each matrix represented a distinct network. Note that, in general, it is difficult to compare two or more networks, because in order to compare networks they need to have the same number of nodes and the same shape (i.e., x number of rows and y number of columns in the matrix) (Scott, 2000).

For each network analyzed, a network graph (or map) was created, which provided a visual reference for noting the overall shape and size of the network, the composition of central and peripheral actors, and identifiable clusters of actors. As explained by Scott (2000):

Graph represents each row or column in an incidence matrix with a single point. The ‘1’ and ‘0’ entries in the matrix, which represent the presence or absence of a relation, are indicated either by the presence or absence of lines between two points. In a graph, it is the pattern of connections that is important, and not the actual positioning of the points on the page. (p. 65)

Graphs were created using a spring-embedded layout algorithm, which results in clusters of mutually connected nodes being placed together. These visualizations are important in

SNA, and the individual researcher must use his or her subjective understanding, aided by descriptive measures, to interpret them. Thus, while SNA may appear to be quantitative in nature (numbers), the results are primarily qualitative (words and patterns). Indeed, Scott (2000) suggests that network graphs “express the qualitative patterns of connections among points” (p. 64).

Our research approach used several groups of analyses, each utilizing qualitative and quantitative data, in order to triangulate. In the next paragraphs I will introduce each analysis and describe the various pieces of data that we examined and found useful.

We first analyzed the data from the retailer checklist, which represented cheesemakers’ perceptions of which retailers sell their cheese in the New England/New York region. Centrality, a common social network measure, was critical to this analysis because it allowed us to identify key actors in the network. While there are several measures of centrality, we utilized *degree centrality scores*. Degree centrality measures the number of ties each individual node has. There are two kinds of degree centrality: in-degree and out-degree. In-degree refers to the number of directed ties that are *incident* on a node, or have *incoming* ties, and out-degree refers to the number of directed ties that *originate* from a node, or have *outgoing* ties. In other words, in-links are the connections that the node of interest receives from other nodes and out-links are the connections that the node of interest sends to other nodes. Because this study only surveyed cheesemakers, all ties are outgoing, or originate, from cheesemakers, and are incoming, or incident, on retailers. Thus, we measured out-degree for cheesemakers and in-degree for retailers. In addition to allowing us to identify key actors in the network, centrality scores also allow the least central points to be identified. On the graph, these appear as peripheral points,

such that they are loosely connected into the network. *Degree sequence* (an ordered list of the in- or out-degree of each node) aids in identifying which actors emerged as the most and least central in the network.

In order to better understand and contextualize the centrality of various actors in the network and investigate emergent patterns, we performed statistical analyses in SPSS. First, we ran a series of correlational analyses to explore promising relationships between centrality scores of cheesemakers and demographic variables such as length of time being a cheesemaker and production volume. With regard to retailers, we calculated frequencies in order to explore patterns in centrality among the different retail categories.

The second analysis involved examining patterns of relations based on the geographic location of retailers. In order to do this, we subsumed all of the individual retailer nodes into meta-nodes based on their location. We created a meta-node for each state, which allowed us to explore patterns of connections across states. A network graph allowed us to visualize whether Vermont cheesemakers are selling cheese only in Vermont or if they have expanded into regional markets. Degree centrality scores were used in tandem with the network graph in order to identify which states were more central to the network. In addition, SPSS was used to run correlational analyses and create contingency tables (i.e., cross tabulations) in order to explore potential relationships between the number of states a cheesemaker had connections to and their centrality score, as well as several scale-related demographic variables.

The third group of network analyses utilized the follow-up data on distributors and direct retail ties. As described previously, after the initial survey data were collected we conducted an additional round of data collection via phone and e-mail, asking

cheesemakers about their use of distributors (how many and which ones) and about specific cases where they do not use a distributor to get their cheese to a retailer (i.e., direct retail ties). Two separate network graphs were created that display cheesemakers' ties to distributors and direct retail ties. Centrality scores were again examined to identify key actors in the distribution and direct retail networks, and patterns were discussed aided by the attribute data acquired through Internet research.

In addition to network analysis, we used statistical analysis to more closely examine the relationship between cheesemakers' number of distributor ties and their number of direct retail ties. Given that using a distributor precludes the existence of a direct retail tie, one might expect to see a negative relationship. A scatterplot graph was created that showed each cheesemakers' position in relation to their number of distributors (x axis) and retail ties (y axis). Qualitative comments from cheesemakers collected in the survey and from follow-up conversations provided context and deepened our appreciation of nuance in the network.

Statistical Analysis

Statistical analysis was used to analyze survey responses to retailer-specific questions (Section IV), which tell us more about the qualities of ties between cheesemakers and retailers. In particular, they can help us to answer questions such as: How did the relationship originate? How long has there been a relationship? How frequently does the cheesemaker and retailer communicate? What kind of information, if any, does the cheesemaker share with this retailer? Thus, they help to answer two broad categories of questions: (1) Origination and history of the relationships (i.e., when, how,

and why connections were forged); and (2) Types of communication and exchange (e.g., information-sharing, meeting face-to-face, frequency of correspondence, etc.).

The unit of analysis was the cheesemaker-retailer *relationship*. In other words, if Cheesemaker A selected Retailer A and Retailer B on the checklist, and they answered a set of retailer-specific question for Retailer A and a set of retailer-specific question for Retailer B, these responses represented two separate relationships: Cheesemaker A-Retailer A and Cheesemaker A-Retailer B. Statistics tell us about patterns of the relationships, not patterns of the individual cheesemakers.

In order to conduct statistics, each question was coded according to its format. For multiple choice questions (e.g., *How long have you sold your cheese there?*) we assigned each response a numerical code (e.g., 1 = *less than a year*, 2 = *1-2 years*, 3 = *3-4 years*, 4 = *5+ years*) and analyzed frequencies. For “select all that apply” questions (e.g., *How did you originally start selling your cheese there?*) we created dummy variables (0 = *no*, 1 = *yes*) and analyzed frequencies for each possible response (e.g., *By sending samples*; *Because of a distributor*; *Because of a particular cheesemonger who works there*; *Because of customer demand*; *Other*).

As mentioned previously in the section on survey limitations, several cheesemakers in our sample stopped the survey after completing the retailer checklist (before Section IV). A few cheesemakers started to fill out the retailer-specific questions but stopped before finishing. A distinction was made between those who stopped prematurely (coded as “partial”; n = 14) and those who made an obvious effort to answer all of the retailer-specific questions (coded as “complete”; n = 15). It is important to note that the subset of cheesemakers that completed the retailer-specific questions is not

representative of the larger surveyed sample. In order to see how this subset of cheesemakers differed from the larger sample, we used SPSS to run a series of cross tabs that compared the two groups on several demographic variables, including length of time being licensed to make cheese, production model, type of animals' milk used, pounds of cheese produced, gross sales, and number of employees.

In general, cheesemakers who produce several styles of cheese or who have been in the business longer (over 15 years) were underrepresented in the subset. There were also clear differences between groups on the basis of scale-related attributes. With regard to volume (pounds) of cheese produced and gross annual sales, the larger producers were underrepresented in the subset. On another indicator of scale—number of full-time employees—larger and mid-sized producers were underrepresented. The reduced sample also lacked cheesemakers who had high numbers of total retailer links and direct retailer links, those that use many distributors, those who had high numbers of links to both Vermont retailers and out-of-state retailers, as well as cheesemakers who had links in several or all seven of the states. In sum, the group of cheesemakers who filled out the survey completely is not representative of the overall sample, and this appears to be an issue related to scale.

In total, 14 cheesemakers went beyond the checklist to thoroughly fill out every page on the survey, giving us complete information on the qualities of all of their relationships to retailers, while 15 cheesemakers gave us complete information on the qualities of only *some* of their relationships. However, because the unit of analysis was the cheesemaker-retailer *relationship*, we were able to include both complete and partial responses.

Summary of Methods

In sum, this phase of the research utilized an iterative, mixed-methods approach to better understand the social structure of the regional distribution network for Vermont artisan cheese. Quantitative and qualitative data were collected through an online questionnaire, follow-up phone calls and e-mails, and content analysis of websites. Social network analysis techniques were used to create visualizations and calculate centrality scores. Statistical analysis was used to calculate descriptive statistics, run correlational analyses, and to explore emergent patterns. Finally, qualitative comments from cheesemakers added rich detail and nuance to the analysis.

CHAPTER SIX

RESULTS & DISCUSSION: SOCIAL NETWORK ANALYSIS

In this chapter I present and discuss the results of the online survey and social network analysis. After summarizing the demographic characteristics of the sample, I discuss all of the analyses related to cheesemaker-retailer relationships: (a) the original network analysis examining cheesemakers' relationships with retailers; (b) a second network analysis using the same data as the original but examining cheesemakers' relationships to *retailers by state*, and (c) a network analysis examining cheesemakers' relationships with only those *retailers that they sell directly* to. I also report on findings from a statistical analysis that examined *quality attributes* of cheesemaker-retailer relationships. I then present and discuss the results of the network analysis of cheesemaker-distributor relationships. Finally, I explore patterns of association between cheesemakers' relationships with distributors and their direct relationships with retailers.

Cheesemaker Attributes

The online survey was sent to 54 cheesemakers. One survey was returned as undeliverable, and this cheesemaker was unable to be reached by phone. Four cheesemakers were excluded after the survey was sent: two were no longer making or selling cheese, and two were new companies that had not sold any cheese in the past year. Of the remaining 49 sent surveys, 35 were returned, resulting in a response rate of 71%.

Demographic variables from the survey are displayed in Table 2. Cheesemakers' length of time making cheese ranged from 1 year to 120 years, with an average of about 14 years, and a bimodal distribution (four cheesemakers each reported 3 and 10 years). In terms of production model, farmstead operations (where cheese is made on the farm

where the animals are raised) were the most common (62.9%). In addition, over three-quarters of respondents use cows' milk to make cheese, while about half use goats' milk; over half (54.3%) reported using just one kind of animals' milk to make cheese, while over a third (37.1%) reported using two animals' milk. On average, cheesemakers reported making three styles of cheese.

Table 2

Descriptive Statistics for Cheesemaker Demographic Variables

Variable	Mean (SE) or %
Years as a licensed cheesemaker in VT (n = 34)	13.79 (3.56)
Production model (n = 34)	
Farmstead	64.7%
Outside sources	14.7%
Both	20.6%
Type of animal (n = 34)	
Cow	82.4%
Goat	50.0%
Sheep	17.6%
Number of types of different animals (n = 34)	
1	55.9%
2	38.2%
3	5.9%
Pounds of cheese sold last year (n = 28)	88,329 (46,872)
100-999	17.9%
1,000-9,999	39.3%

10,000-99,999	25.0%
100,000-999,999	14.3%
> 1,000,000	3.6%
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Gross sales (\$) last year (n = 23)	634,813 (324,826)
< 10,000	21.7%
10,000-49,999	8.7%
50,000-99,999	13.0%
100,000-499,999	34.8%
500,000-999,999	13.0%
> 1,000,000	8.7%
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Average number of employees (n = 33)	
Full-time	6.3 (2.0)
Part-time	1.1 (0.3)
Seasonal	1.6 (0.7)
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Style of cheese (n = 34)	
Fresh	44.1%
Soft bloomy rind	38.2%
Soft washed rind	23.5%
Soft natural rind	11.8%
Blue-veined	26.5%
White brined	8.8%
Washed rind tome	20.6%
Natural rind tome	35.3%
Alpine mountain	38.2%
Pressed English & American styles	32.4%
Dutch styles	17.6%
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Hard Italian grana	14.7%
Hard Italian pecorino	8.8%
Pasta filata	0%
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Mean number of cheese styles (n = 34)	3.2 (0.4)
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Note. SE = standard error of mean.

Cheesemaker-Retailer Relationships

The first network analysis utilized data from Section III on the survey, where cheesemakers were provided with a list of retailers and told to identify any retailers that had sold their cheese in the past year. Figure 5 displays the resultant network, with red circles representing cheesemakers (n = 35) and green circles representing retailers (n = 300). Nodes with many ties (i.e., well-connected) are located at the center, while nodes with only one tie (i.e., less connected) are located at the periphery. A visual inspection of the map suggests that the network is clustered around several well-connected cheesemakers and retailers. There are no isolates in the network, indicating that every cheesemaker reported a connection to at least one retailer. The two dyads on the outer periphery represent cheesemakers who are connected to a lone, singly-connected retailer (i.e., not identified by any other cheesemaker).

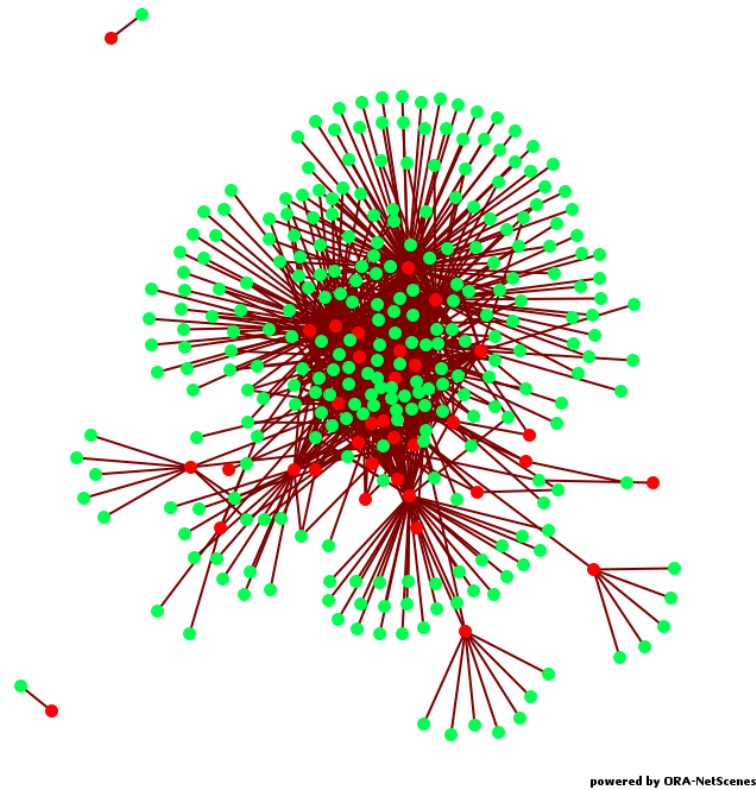


Figure 5. Network graph showing ties between Vermont cheesemakers (red circles) and regional retailers (green circles)

Cheesemaker Centrality

In order to identify key actors in the network, and gauge how connected each individual cheesemaker is in the social network (i.e., how many retailers they perceive being connected to) we examined out-degree centrality. It should be noted that, while degree centrality can help us to get a sense of which cheesemakers are most connected to retailers in the region, in this study it does not necessarily indicate cheesemakers' level of regional sales, geographic reach, or importance; it indicates cheesemakers' *perceptions*.

The maximum number of out-links reported by an individual cheesemaker was 125, the minimum was 1, and the mean was 25.4 (SD = 31.6). The degree distribution

was positively-skewed, or right-tailed, such that only a few cheesemakers were at the high end of the distribution (near 100 links), several were in the middle, and many were on the low end. Ten of the 35 cheesemakers reported 5 or fewer ties. Cheesemakers with the same number of ties were assigned the same rank, such that there were 24 ranks total. Table 3 displays the centrality scores for all cheesemakers ($N = 35$) in the network, categorized as high, medium-high, medium-low, and low centrality.

Table 3

Cheesemakers ($N = 35$) Ranked by Centrality Score

Rank	Cheesemaker Code	Centrality Score	# of Ties	
1	35	0.417	125	
2	69	0.377	113	
3	46	0.283	85	HIGH
4	29	0.260	78	
5	23	0.233	70	
6	82	0.187	56	
7	37	0.127	38	
8	83	0.107	32	
9	16	0.103	31	MEDIUM-HIGH
10	51	0.083	25	
10	76	0.083	25	
11	81	0.077	23	
12	22	0.073	22	
12	63	0.073	22	
13	27	0.060	18	
13	59	0.060	18	

14	38	0.040	12	
14	41	0.040	12	
15	21	0.037	11	
16	13	0.033	10	
17	53	0.030	9	MEDIUM- LOW
17	61	0.030	9	
18	20	0.027	8	
19	48	0.020	6	
19	68	0.020	6	
20	62	0.017	5	
21	19	0.013	4	
21	39	0.013	4	LOW
22	64	0.010	3	
23	44	0.007	2	
23	71	0.007	2	
24	18	0.003	1	
24	32	0.003	1	
24	56	0.003	1	
24	78	0.003	1	

Focusing in on the high end of the degree sequence, the average number of ties for the top four ranked cheesemakers is 100. Moreover, the five cheesemakers with high centrality are widely-regarded as key players in the artisan cheese industry, both in Vermont and the U.S. All five took home awards at the 2013 ACS Conference. In fact, Cheesemaker 69, ranked second, won the highly-coveted Best of Show award, and Cheesemaker 35, ranked first, was the runner-up. Whether these producers' eminence is a cause or consequence of their extensive retail presence in the region is unknown.

Years in business, which is related to experience, seems to be an important factor among cheesemakers at the top of the degree sequence. These cheesemakers are not new companies. For example, ranked first with 125 ties, Cheesemaker 35 reported that its company has been licensed to make cheese in Vermont for 120 years. This extraordinarily high number becomes plausible when you consider that they trace their company's beginnings back to a cheese-making cooperative of dairy farmers formed during the late nineteenth century. Further research into the matter confirms this history but also suggests that it was not a continuous tradition. On their website they note that a fire destroyed the cooperative's factory in 1912, and that it was not until the mid-1960s that a nonprofit organization built a new factory in the town and "restored the company." In spite of this technicality, the fact remains that Cheesemaker 35 has several decades of experience making and selling cheese. The remaining highly centralized cheesemakers reported slightly lower, but still relatively high, numbers of years in the artisan cheese business: Cheesemaker 69 (113 ties, 10 years), Cheesemaker 46 (85 ties, 30 years), Cheesemaker 29 (78 ties, 20 years), and Cheesemaker 23 (70 ties, 9 years).

In order to statistically test if there was a relationship between out-degree centrality score and number of years making cheese, we conducted a correlation analysis and found that there was a moderate positive correlation, $r = .59, p < .001$. This indicates that cheesemakers who have been in the business longer tend to have more connections to retailers in the region. Perhaps this is because it takes several years to become established as a cheesemaker and build up these relationships. Alternatively, it could be a matter of needing time in order to acquire capital to increase one's scale of production. Those just starting out may begin at a smaller production scale due to constraints of economic

capital or infrastructure, or as a strategy to minimize risk of failure. Low production volumes reduce the likelihood of selling cheese through many retailers. Indeed, a strong correlation exists between a producers' reported pounds of cheese and centrality scores, $r = .771, p < .001$. Table 4 reports the results of these and other correlation analyses.

Table 4.

Correlations Between Cheesemaker Attributes and Centrality Scores

	Years	Animals	Number of styles	Pounds of cheese	Gross sales	Full-time employees	Centrality
Years licensed to make cheese	—						
Number of different types of animals	.087	—					
Number of styles of cheese	.059	.366*	—				
Pounds of cheese	.820**	.055	.367*	—			
Gross sales	.550**	.003	.521**	.896**	—		
Full-time employees	.554**	.026	.227	.663**	.667**	—	
Centrality	.590**	.228	.535**	.771**	.773**	.807**	—

** $p < 0.01$ level* $p < 0.05$ level

At the low extreme of the degree distribution, three cheesemakers (18, 56, and 78) reported only one retailer tie, yet for seemingly diverse reasons. Cheesemaker 18, in its

third year of business, is a small farmstead cheese operation self-described as a “family-run micro-dairy goat farm.” From their website materials, it is clear that they participate in an ultra-localized food system, selling at several farmers’ markets in their area, as well as through direct orders. With only one person physically making cheese and a mission statement centered on environmental sustainability and animal welfare, it is not surprising that their only retail outlet is an alternative place-based venue—a regional “Tasting Center.” Appearing similar on the surface, Cheesemaker 56, who has been licensed to make cheese for just one year, explained in an e-mail that they are currently only “present at our local general store.” However, she noted that they also sell directly to a few restaurants in New York City, which makes sense given that they worked in the restaurant business there before moving to Vermont. She noted that they may be “going retail” in the next year. Their case suggests that it takes time for artisan cheesemakers to break into retail markets outside of their immediate vicinity, if “going retail” is what one aspires to. Thus, whereas Cheesemaker 18 appears to consciously embrace a direct sales-oriented, community-based business model, Cheesemaker 56’s current position at the low end of the out-degree sequence is likely a result of their newness to the network.

The third and final cheesemaker with a single out-link represents an important case and a reminder that these ranks are a reflection of producer’s *perceptions*, not actual sales connections. Cheesemaker 78, in existence for 5 years, reported selling only at their on-site retail store, which is part of a museum’s Welcome Center. The head cheesemaker later told me that they also recently started using a distributor, who “picks up anything that is left” (typically only one of their two styles of cheese). While she was able to provide me with a list of stores that the distributor ships to—and, therefore, stores their

cheese might be sold in—she did not actually know *which* retailers order their cheese and sell it. Thus, it is important to recognize that cheesemakers at the low end of the distribution may be present at additional stores in the region, yet, because they are not aware of which stores, they cannot perceive or report a relationship. This ignorance may be a result of using a distributor. When this is the case, it is impossible to tell how many stores a cheesemaker is actually present in. This can be interpreted as the difference between a *sales* network and a *social* network, and will be explored in more detail later.

Retailer Demographics & Centrality

A total of 300 retailers were identified through the survey as selling Vermont artisan cheese in the New England/New York region. In order to better understand the attributes of these retailers, we first analyzed frequencies of store location and store type. Information on location (city and state) was included with the retailer name in the survey checklist, and respondents were asked to specify the location if they wrote an “Other” response. Retailers were categorized into store types after the survey responses were collected using publicly available information on the Internet (e.g., retailer websites). The store categories are not mutually exclusive; for instance, many general stores are also independent groceries. Chains were determined to be any retailer with more than three locations; however, a few could be further categorized as a natural/health or gourmet food store. For cases where a retailer fit into multiple categories, a consistent set of procedures was followed.

Table 5

Frequency of Retailers By Location (State) and Store Type

Store type	CT	MA	ME	NH	NY	RI	VT	Total	%
Co-op	3	4	2	5	4	1	10	29	9.7
Natural/health	1	3	1	0	2	1	4	12	4.0
Gourmet/cheese	11	30	14	12	54	6	16	143	47.7
Independent grocery	3	9	4	3	6	1	9	35	11.7
General store	1	0	0	2	0	0	10	13	4.3
Convenience store	0	0	0	0	0	0	1	1	0.3
Chain (regional)	4	3	0	0	7	1	1	16	5.3
Chain (national)	1	1	1	0	1	1	0	5	1.7
Restaurant	0	3	6	3	3	0	4	19	6.3
Farm store/farm stand/CSA	1	5	1	0	3	2	5	17	5.7
Other	0	0	0	1	1	0	8	10	3.3
Total	25	58	29	26	81	13	68	300	
%	8.3	19.3	9.7	8.7	27.0	4.3	22.7		

Note. “Other” = online retailer, brewery, winery, hotel, resort, tourist attraction

Next, in-degree centrality was examined to better understand the connectedness of individual retailers in the network. The maximum number of incoming links any retailer had was 23 and the minimum was 0. Thus, for the top ranked retailer, almost two-thirds (65.7%) of cheesemakers reported having their cheese sold there. On average, though, retailers had about 3 cheesemaker connections ($M = 3.0$; $SD = 3.8$), and almost half of

retailers ($n = 140$) had just one connection, which indicates a right-tailed distribution and is shown on the network map (Figure 5) by the green nodes located on the periphery.

Table 6 displays the top-most central retailers, determined by the researcher to be those with 10 or more in-links, along with their respective locations and designated store type. This clearly demonstrates that four front-runners emerged: RET-160, a food cooperative in Vermont's most populated city, Burlington, with 23 ties; RET-163, an independently-owned natural foods grocery store in South Burlington, with 22 ties; RET-156, a cooperative in the slightly less populated city of Brattleboro, VT, with 21 ties; and RET-164, a cooperative in the state capital, Montpelier, with 20 ties. As these profiles hint at, some interesting patterns emerged among retailers with high centrality. Next, I will discuss two categories of patterns: store type and geographic location.

Table 6

Retailers ($N = 300$) Ranked by Centrality Score

Rank	Retailer Code	Centrality Score	# of Ties	Location	Store Type
1	RET-160	0.657	23	VT	Co-op
2	RET-163	0.629	22	VT	Natural/health
3	RET-156	0.600	21	VT	Co-op
4	RET-164	0.571	20	VT	Co-op
5	RET-165	0.457	16	VT	Co-op
5	RET-173	0.457	16	VT	Independent
5	RET-79	0.457	16	NH	Co-op

6	RET-171	0.429	15	VT	Co-op
7	RET-167	0.400	14	VT	Co-op
8	RET-136	0.371	13	NY	Gourmet/cheese
9	RET-170	0.343	12	VT	Independent
10	RET-162	0.314	11	VT	Gourmet/cheese
10	RET-44	0.314	11	MA	Gourmet/cheese
11	RET-129	0.286	10	NY	Gourmet/cheese
11	RET-148	0.286	10	RI	Gourmet/cheese
11	RET-172	0.286	10	VT	Gourmet/cheese
11	RET-61	0.286	10	MA	Gourmet/cheese
11	RET-68	0.286	10	MA	Chain (national)

Note. Only includes retailers with 10 or more in-links.

Type of retail store. As Table 5 clearly demonstrates, Vermont cheesemakers identified several diverse categories of retail stores. Of the top ten most central retailers, 8 (6 in Vermont, 2 in New Hampshire) are co-operative food stores, meaning that they are either worker- or customer-owned businesses that are typically committed to a range of social values, such as supporting local farmers and food producers, strengthening the local community, promoting environmental sustainability, and providing consumer education. The remaining two include a natural/health foods market and an independent grocery, both of which espouse similar values and appear to prioritize food with quality attributes such as local, natural, and organic. The fact that 80% of the top ten were co-ops is striking when you consider that co-ops made up less than 10% of the whole sample.

Moving further down the degree sequence, as you see more retailers located outside of Vermont, co-operatives become less frequent and are replaced by gourmet food stores, including cheese shops. For example, the cheese shop where I did my ethnographic fieldwork, RET-44, has a rank of 10. This is not surprising, given that Vermont cheeses made up a huge proportion of their domestic selection and one cheesemonger told me that they are “all about the local.” In a similar vein, RET-136 is dedicated to American farmstead cheese, with a particular focus on cheeses from the Northeastern United States, and the co-owners “pride themselves on selecting cheeses from small producers who farm sustainably with respect for their land and animals” (website materials). Although small, given their high centrality in the network, both appear to be powerful partners for Vermont artisan cheesemakers in urban centers.

Chain retailers are another interesting category to consider; based on my observations at the ACS conference, they are playing an increasingly large role in the U.S. artisan cheese industry. In this study retailers were characterized as chains if they had three or more locations in a given state, and these locations were collapsed into one “multiple locations” entry specific to a state. The only chain retailer in the high centrality was Retailer 68, a national supermarket focused on natural and organic foods, which had 10 in-links across its Massachusetts locations. This same chain had 9 ties for its Maine location(s), 5 for New York, 7 for Rhode Island, and 1 for Connecticut, for a total of 32 ties across the region. Note that this does not mean that 32 cheesemakers reported a connection; rather, it is likely that a cheesemaker who sells through this chain is present in several store locations and more than one state. Thus, while chain retailers appear to be

playing a role for some Vermont cheesemakers in regional markets, the majority of producers are probably not selling through them.

It is worth noting that the survey's retailer checklist did not include any chain food stores in Vermont or New Hampshire. Moreover, cheesemakers' "Other" responses did not identify any chain stores in these two states. In order to more closely examine whether cheesemakers' perceptions seemed to accurately reflect the chain retailer situation in Vermont, I systematically visited three separate regional chain supermarkets located within one mile of each other in South Burlington, VT. Between the cheese departments of the three stores, I found artisan cheese made by five producers in this study. As these connections did not emerge through the survey, this suggests that artisan cheese gets to these large chains through distributors. Thus, chains may be playing a larger role in the retail of Vermont artisan cheese both within and outside of the state than is suggested by the analysis. While this underscores a limitation of the study, it also reinforces an important finding, which is that the use of distributors in the Vermont artisan cheese network often leads to a disconnect between cheesemakers' knowledge of where their cheese is sold and where it is actually being sold. And when there is no knowledge of a tie, there is likely no social relationship.

In contrast, cheesemakers frequently identified social relationships with food co-operatives in Vermont and New Hampshire. For instance, consider Cheesemaker 16 (ranked ninth with 31 ties), who sells both through in-state co-ops and out-of-state chains, but whose manager told me that they sell as much cheese at one Vermont co-op—RET-160, the top most central retailer—than in all of their stores in the North-Atlantic region. Moreover, she suggests that the *type* of relationships that they have with big chain stores

is different from other retailers: “Our relationship with [national chain retailer] is congenial but more of a business relationship.” Her comment points to the existence of a continuum between sales, or business, relationships on one end and more intimate social relationships on the other.

In addition to co-ops, general stores in Vermont were observed as playing a small, but noticeable, role for cheesemakers. Although they made up only 4.3% of the sample, 76.9% are located in Vermont. These retailers tend to be smaller, more quaint, “country stores,” located in rural areas and offering a variety of Vermont products. Recall that Cheesemaker 56 reported only being present at the general store in their tiny village (population around 237). While they are certainly not very central to the network, general stores—prominent in Vermont and New Hampshire—may carry other benefits for producers. For instance, they may serve as a stepping stone into retail markets. Additionally, stocking local artisan cheeses in these stores may function to increase access for more rural consumers, as well as to promote and communicate a taste of place to locals and tourists alike.

Finally, it should be noted that several non-traditional retailers emerged through the open text option, “Other,” on the retailer checklist. These included farm stands, farm stores, and CSAs, as well as restaurants, resorts, breweries, and online retailers. Although it was not our intention to collect information about restaurants or these other venues—we did not include any restaurants in the survey options—we opted to include them in the network analysis. While food systems scholars typically consider retailers and restaurants as two separate categories, it remains the goal of this study to accurately represent cheesemakers’ perceptions. If cheesemakers view these as retail venues—places where

their cheese is sold to consumers, especially out-of-state, urban consumers—then they are important to the study. With that said, this indicates that there is some blurriness of retailer types and categories in the minds of at least some Vermont cheesemakers.

Geographic location. Among the ten retailers ranked highest in centrality, eight are located in Vermont, while the remaining two are located in New Hampshire, just over the Vermont border. As Vermont retailers make up only 22.7% of the entire sample, this high frequency in the top ten is striking. Going further down the degree distribution, you begin to see more out-of-state retailers, particularly those located near urban centers. For example, RET-136, ranked eighth with 13 ties, is located in New York City; RET-44, ranked tenth with 11 ties, is located outside of Boston; and RET-148, ranked eleventh with 10 ties, is located in Providence, RI. This suggests that there are a handful of key retailers that are helping Vermont artisan cheesemakers reach regional urban markets.

Comparison of Relationships across States

Using the geographic data on retailer locations we were able to conduct a state-level analysis. To do this, we subsumed all of the individual retailer nodes into retailer meta-nodes based on state (one node each for CT, MA, ME, NH, NY, RI, and VT), which allowed us compare cheesemakers' connections across individual states. From the resultant network graph (Figure 6), we get a visualization of the pattern of in-state versus out-of-state sales for Vermont cheesemakers. Note that cheesemaker nodes on the periphery half-circle have just one link to Vermont, whereas cheesemaker nodes on the inner circle have at least two links, meaning they are connected to retailers both in Vermont and outside of Vermont. In total, 10 cheesemakers (28.6%) only sell cheese to retailers in Vermont. The remaining cheesemakers ($n = 25$) are connected to retailers both

in Vermont and outside of Vermont. The network map also appears to show a primary core in the center made up of Massachusetts, Connecticut, and New York, suggesting that these three states are more mutually connected than the others. In other words, if a Vermont cheese is present in Massachusetts, it is likely that it is also present in Connecticut and New York. This makes sense given that these states are more urban compared to New Hampshire and Maine.

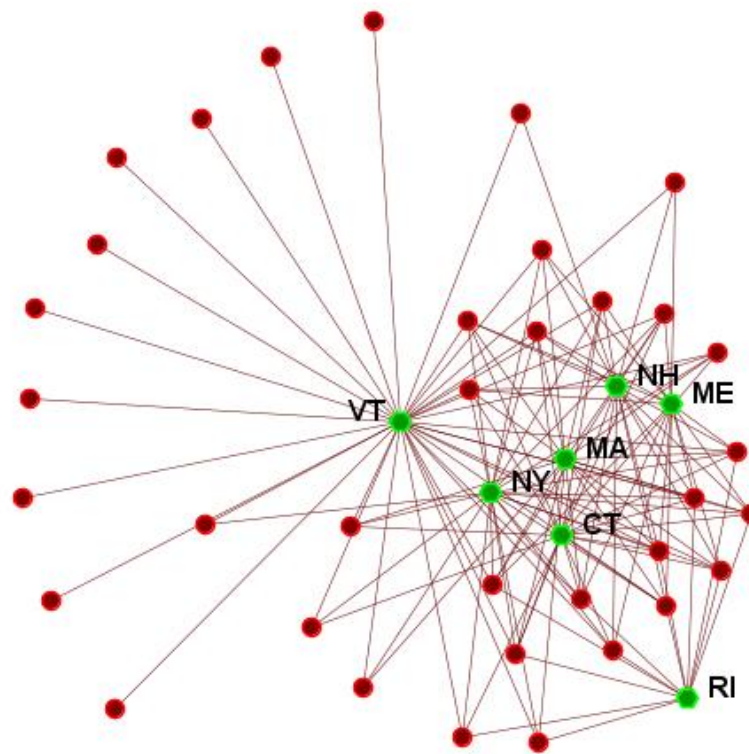


Figure 6. Links between cheesemakers (red circles) and state nodes (green circles), which represent retailers in CT, MA, ME, NH, NY, RI, and VT

For the retailer state meta-nodes, we compared centrality scores and the number of connections associated with each state. With regard to in-degree centrality, Vermont

led all states with 285 cheesemaker connections, followed by Massachusetts (194) and New York (182). This makes sense given the large urban markets in Boston and New York City. In the middle of the degree distribution, New Hampshire had 86 cheesemaker connections, Connecticut had 63, and Maine had 53. Rhode Island was, by far, the least connected state in the region with just 27 connections, which may be a result of its small size combined with the fact that it is not directly adjacent to Vermont.

We then examined cheesemaker centrality across the states in the network. A pattern emerged when examining the number of states a cheesemaker is connected to in relation to their centrality in the network. Cheesemakers with high centrality (i.e., those with the most links) tend to have connections to retailers in most or all of the seven states. Those with a mid to high degree of centrality appear to be connected to a couple of states, including Vermont, very strongly. For example, Cheesemaker 82 (56 ties) has 22 connections in Vermont and 13 connections in Massachusetts. Further down the degree centrality distribution, we tend to see cheesemakers' proportion of ties heavily favoring Vermont, although they may have a small presence in other states, such as Cheesemaker 63 (22 ties; 14 VT ties) and Cheesemaker 83 (32 ties; 13 VT ties). Finally, cheesemakers with low centrality are not well-connected in Vermont or out-of-state. Statistical analysis confirmed a strong positive correlation between out-degree centrality and number of states, $r = .682, p < .001$.

It is logical that scale of production would be an important factor in explaining why certain cheesemakers are able to sell to retailers in several states. Using crosstabs to examine how scale-related measures such as number of employees, production volume (i.e., pounds of cheese), and total sales relate to number of states, we observed that

cheesemakers who employ several full-time employees (9 or more) had ties to retailers in all seven states. Moreover, with a couple of exceptions, cheesemakers who reported larger volumes and gross sales tended to have connections to six or seven states. Further investigation into the exceptions suggests that they might be erroneous data; for instance, Cheesemaker 46—one of the most recognized and experienced cheesemakers in Vermont and the U.S.—reported a volume of 3 pounds and \$16 in gross sales over the past year. While this could be due to confusion about the question or desired units, it could also indicate a reluctance of successful cheesemakers to divulge this type of information. As such, typologies or predictions that are constructed from the self-reported demographic data should be interpreted cautiously as possible emergent patterns.

In addition to a potential influence of scale, qualitative data collected during the follow-up suggests that other factors are at play. In particular, Cheesemaker 16 explained their business goal as prioritizing place and proximity: “We try to sell as close to our property as we can.” Although there are likely markets for their cheese in New York City, the cheese manager says that they would sell out before they could get there. Yet, this same cheesemaker is currently present in all seven states, including big chains, suggesting that a complex calculus exists for choosing where, how, and when to pursue demand in order to meet business goals.

Quality of Cheesemaker-Retailer Relationships

From the previous network analyses we are better able understand the structure of the cheesemaker-retailer network and are able to identify key actors in this network. In order to dig deeper into the content and qualities of some of these relationships, we conducted statistical analysis using responses to the more in-depth retailer-specific

questions. While just 14 cheesemakers filled out this section completely (i.e., for all of their relationships), an additional 15 cheesemakers filled out questions for at least one of their relationships. By making our unit of analysis the cheesemaker-retailer relationship we were able to retain this partial data. In total, we analyzed data for 124 relationships.

Table 7

Frequency of Characteristics of Cheesemaker-Retailer Relationships (N = 124)

Variable	Frequency
Distributor? (n = 124)	50%
How long have you sold there? (n = 119)	
< 1 year	20.2%
1-2 years	10.9%
3-4 years	13.4%
5+ years	55.5%
How did you initially begin selling there? (n = 124)	
By sending samples	21%
Because of a distributor	37.9%
Because of a cheesemonger	22.6%
Customer demand	15.3%
Other	22.6%
Share information? (n = 114)	58.8%
Information about products	92.5%
Information about farm/dairy	73.1%
Information about production conditions	49.3%
Other	6.0%

How often correspond? (*n* = 89)

Once per week	18.0%
Once per month	25.8%
Once per quarter	15.7%
Once every 6 months	5.6%
Once per year	32.6%
Never	2.2%

Met cheesemonger? (*n* = 119)

How many times did you visit retailer? (*n* = 117)

Never this past year	49.6%
Never this past year but once in past 5 years	16.2%
Once or twice this past year	15.4%
3-4 times this past year	6.0%
5+ times this past year	12.8%

How many times did retailer visit you? (*n* = 115)

Never this past year	73.0%
Never this past year but once in past 5 years	13.9%
Once or twice this past year	11.3%
3-4 times this past year	0.0%
5+ times this past year	1.7%

As Table 7 indicates, exactly half (50%) of all cheesemaker-retailer relationships involved a distributor. Moreover, distributors emerged as the most frequent reason for why relationships were formed in the first place; cheesemakers began selling at a retail store “because of a distributor” in 37.9% of cases, compared to 22.6% “because of a

cheesemonger.” This confirms the importance of distributors to Vermont artisan cheesemakers in the network.

Over half (55.5%) of the relationships analyzed were well-established (over 5 years), which could be an indication of two things. First, it could be an indication of the *strength* of the relationship, in that it has endured over this time period. Second, it may be that cheesemakers are more likely to remember to report relationships they have been established for a long time. Yet, further examination of the frequencies for this question does not support that; brand-new (less than a year) relationships were more common than those that had been established for 1-2 or 3-4 years. Taken together, this could indicate a sort of primacy-recency effect, which is the tendency of a person to recall the things that came first (primacy) and the things that came last (recency) better than the things in the middle.

Information-sharing occurred in over half (58.8%) of the cheesemaker-retailer relationships. Among these 67 relationships, sharing information about products was most common (92.5%), followed by information about the farm/dairy (73.1%), and information about the production conditions (49.3%). In order to see approximately how often cheesemakers corresponded with their retail connections, we analyzed frequency. Given the highly variable nature of artisan cheese from a sensory standpoint, it might be expected that communication would occur between producers and retailers on at least a quarterly (i.e., seasonal) basis, if not more frequently due to batch-to-batch variation. In a quarter (25.8%) of the relationships, correspondence by phone or e-mail occurred on a monthly basis. An additional 18% of relationships involved weekly correspondence. Yet, the most frequent response—about a third (32.6%) of cases—was “once per year,”

suggesting that there may be very little ongoing communication happening in many cheesemaker-retailer relationships.

Ever Met was a yes or no question, designed to give us a basic measure of whether cheesemongers play any role in the relationship. *Visits To* and *Visits By* are measures of frequency within the last year. In over two-thirds (69.7%) of relationships, cheesemakers had met a cheesemonger who worked at a particular retailer face-to-face. Moreover, visits to retailers (by cheesemakers) happened more frequently in the last year than visits by cheesemongers (to cheesemakers and the place of production). Note that it was possible for respondents to say that they had never met a cheesemonger at a particular retailer but that visits to or by that retailer had occurred. This may be because the cheesemaker went to the store for another reason (e.g., food shopping). Conversely, respondents may have met a cheesemonger without any visits having taken place. For example, two cheesemakers reported meeting a cheesemonger at the Vermont Cheese Festival, and one recalled that a cheesemonger had “chatted with him” at his local farmers’ market. Other qualitative comments from cheesemakers related to these questions include: “They visited the farm this summer”; “I visited the store last winter”; “It’s a long haul to get to Montpelier, but if we find ourselves in the area, we stop in”; “I personally (cheesemaker) do not have contact (other than when they came here) but our contracted sales guy goes weekly”; and “I don’t know these folks personally.”

Direct Relationships between Cheesemakers and Retailers

The quality of cheesemakers’ relationships to retailers may be related to whether they sell directly to them or go through a distributor. For the follow-up questions about direct retail ties, we were unable to reach two cheesemakers, leaving us with a slightly

smaller sample ($N = 33$). Moreover, five of these cheesemakers gave us information about *number* of direct retail ties but failed to provide *names*, and thus we were unable to include them in the network analysis, resulting in a final sample of 28. We were able to include these five cheesemakers in a statistical analysis (detailed later) which required only the *number* of direct retail ties. As in the previous sections, qualitative data taken from the original survey and collected during follow-up procedures provides additional depth and nuance.

Figure 7 shows the network of cheesemakers and retailers who are connected by direct ties, with red circles representing cheesemakers ($n = 28$) and green circles representing retailers ($n = 129$). The network has several areas of disconnect. As you can see on the periphery, several cheesemakers (46%) have just one, two, or three retailers that they sell directly to. A single isolate node—a cheesemaker that does not have any direct ties to retailers—should also be noted. Only four cheesemakers (14%) have more than ten direct retail links. Finally, there appear to be three main clusters in the center of the graph. The two outer clusters include retailers that are only connected to one highly-connected cheesemaker. The cluster in the middle includes more mutually connected nodes (i.e., retailers that more than one cheesemaker identified as selling directly to).

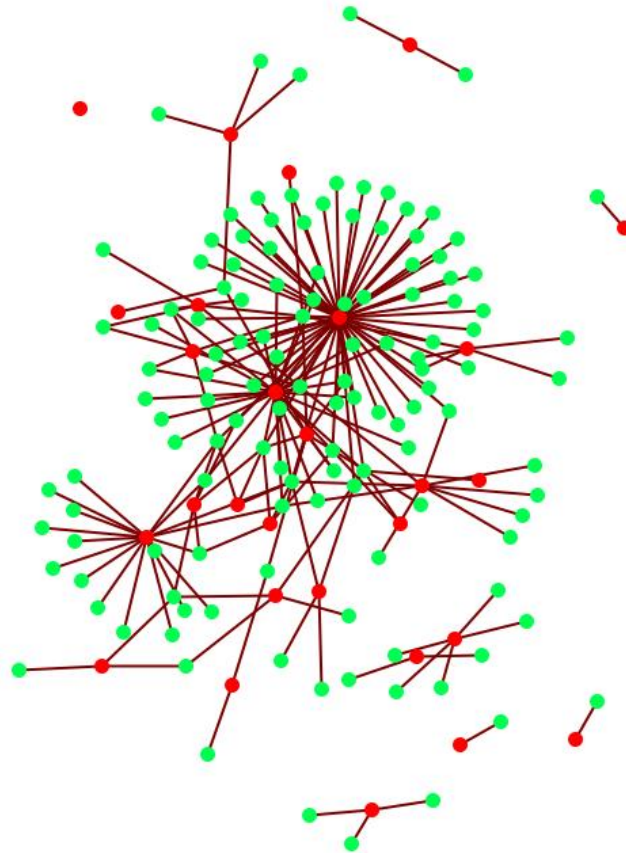


Figure 7. Network map showing direct ties (i.e., no distributor) between cheesemakers (red circles; $n = 28$) and retailers (green circles; $n = 129$)

On average, cheesemakers had 7 direct retail ties ($M = 6.64$, $SD = 11.32$). The cheesemaker with the most direct retail ties had 58. Only one cheesemaker had no direct retail ties, although I was informed that they sell direct to some restaurants—“the ones from the beginning”—as a way to continue those early relationships. Table 8 displays cheesemakers’ centrality in the direct retail network.

Table 8

Cheesemakers ($N = 28$) Ranked by Centrality Score (Direct Retail Ties)

Rank	Cheesemaker Code	Centrality Score	# of Ties
1	16	0.450	58
2	81	0.209	27
3	53	0.140	18
4	76	0.070	9
5	13	0.062	8
6	23	0.047	6
6	27	0.047	6
7	63	0.039	5
7	68	0.039	5
7	82	0.039	5
8	22	0.031	4
8	39	0.031	4
8	48	0.031	4
8	51	0.031	4
9	19	0.023	3
9	61	0.023	3
9	64	0.023	3

Note. Includes only cheesemakers with 3 or more ties.

Among cheesemakers with high centrality in the network, most are well-established and have an extensive geographic reach, having been in business for at least 10 years and selling in 6 or 7 states. Cheesemaker 53 appears to be the exception, having been in business for only 4 years and selling in 3 states. Also recall that cheesemakers

who reported a number but chose not to identify names of direct retailers were excluded from this analysis. If we were only considering quantity, Cheesemaker 37 and Cheesemaker 83 would be among the top with 100 and 50 direct retail ties, respectively.

With regard to retailer in-degree centrality scores, the minimum was 1 and the maximum was 8 ($M=1.44$, $SD = 1.12$). Table 9 displays the centrality scores, number of ties, and locations of the top-most central retailers (those with at least three ties). There is considerable overlap between retailers at the top for centrality in this network and those who came in at the top for centrality in the original survey network. This makes sense given that survey responses represent cheesemakers' overall awareness of ties, and therefore likely incorporated some effect of direct ties.

Table 9

Retailers (N= 129), Direct Ties, Ranked by Centrality Score

Rank	Retailer Code	Centrality Score	# of Ties	Location	Store Type
1	RET-163	0.286	8	VT	Natural/health
2	RET-160	0.214	6	VT	Co-op
2	RET-44	0.214	6	MA	Gourmet/cheese
4	RET-156	0.179	5	VT	Co-op
4	RET-165	0.179	5	VT	Co-op
5	RET-136	0.143	4	NY	Gourmet/cheese
5	RET-267	0.143	4	VT	Independent
6	RET-162	0.107	3	VT	Gourmet/cheese
6	RET-170	0.107	3	VT	Independent

6	RET-171	0.107	3	VT	Co-op
6	RET-238	0.107	3	NY	Natural/health
6	RET-253	0.107	3	VT	Gourmet/cheese
6	RET-89	0.107	3	NY	Gourmet/cheese

Note. Includes only retailers with 3 or more ties.

We can also observe a disproportionate sampling of Vermont retailers (69.2%) at the top, which suggests the importance of geographic proximity to the building of social relationships between cheesemongers and retailers. This may be because it increases the ability of cheesemakers to physically go to a store, or the ability of cheesemongers to go to the farm. For instance, Cheesemaker 64 commented about one Vermont co-op that they sell directly to: “Jon came to pick up the cheese for his past order.” In addition, Cheesemaker 19, a husband and wife team, pointed to the social benefits of proximity to forming relationships with retailers in one of their open-text responses: “As with the other Stores, we feel delivering the cheeses ourselves really creates strong relationships with them. We love it, so do they.”

The importance of proximity makes sense given the obstacles encountered by cheesemakers who coordinate and arrange their own shipping to retail stores. For instance, one cheesemaker, who primarily goes through distributors, vehemently emphasized how expensive and time-consuming it is to ship cheese directly, saying: “To wrap up individual orders is inefficient.” Yet, the fact that she also sells directly to one gourmet food store in Connecticut suggests that proximity is not the only factor in cheesemakers’ decision to sell direct. Indeed, another cheesemaker, Cheesemaker 23,

gave me a list of eight direct retail ties located around the country, with six located in the New England/New York region.

Six cheesemakers reported selling only direct to retailers (i.e., no distributors). As discussed previously, Cheesemakers 18 and 56 each sell directly to their one and only retail connection. Among other cheesemakers that have only direct ties to retailers, scale and proximity appear to be important factors. For example, Cheesemaker 64 sells only direct—to three nearby stores in Vermont—saying: “We do not use a distributor at all. We drop the cheese off at the store ourselves.” Cheesemaker 48 and Cheesemaker 39 each sell directly to their four retailers, all of which are located in Chittenden County, the most populous county in Vermont. The one exception, Cheesemaker 13, sells directly to all eight of its retail connections, which comprise a range of local (same town), in-state, and out-of-state stores, thereby indicating that direct ties are not limited to proximate or in-state retailers.

While we cannot establish a reliable pattern with regard to either proximity or scale to predict direct retail ties, a few trends emerged regarding store type. First, co-operative food stores in Vermont were disproportionately identified as a direct link during follow-up. A possible reason for this is that co-ops have the infrastructure and human resources to manage direct ties. It may also have to do with the mission and values upon which many food co-ops are built, such as bringing consumers closer to their food source and community engagement.

Notably, the site of my ethnographic fieldwork, RET-44, emerged as another frequently identified direct tie. Qualitative comments suggest that this may have to do with their dual role as a retailer and supplier to restaurants. For instance, highly-central

Cheesemaker 69 explained: “[RET-44] is the only retailer in this region (or anywhere, actually) that we sell to directly. But they’re also a wholesaler to restaurants so they buy significantly more volume than pretty much any other cheese shop could.” This notion that RET-44 plays a role beyond just that of a retail store will be discussed in more detail later. In addition, Cheesemaker 63 told me during follow-up: “For [RET-44], [name of cheesemonger] comes up and picks it up himself.” This confirms the existence and function of cheese trips, as described in the ethnographic narrative. While one other cheesemaker mentioned a retail employee coming out to the farm to pick up a recent order, in general it appears that using cheese trips as a regular way to transport cheese is not common among retailers and may be unique to this retailer.

Cheesemaker-Distributor Relationships

By following up with cheesemakers to ask whether or not they used distributors, we were able to get a better sense of the role that distributors play in the network. This was a name generating question, such that cheesemakers were not given a list of options as they were on the survey’s retailer checklist. We manually entered names of distributors into a spreadsheet. If a cheesemaker named a distributor that was found to be *based* outside of the region of interest, we kept it in if we could verify that it *distributes* within the region of interest. Some distributors operate in a clearly delineated region, while others have a broad national reach. Thus, although it appears that there is an active national distributor market for Vermont artisan cheese, we purposefully tried to maintain the study’s focus on retail locations in the New England and New York region. After eliminating 9 distributors based on this criterion, 36 were left for the analysis.

Figure 8 illustrates the cheesemaker-distributor network, with red circles representing cheesemakers ($N = 33$) and blue triangles representing distributors ($N = 36$). A visual inspection shows a tight central core of three distributors. Also note the presence of two disconnected networks—a dyad and a triad—as well as several isolates on the periphery, indicating that six cheesemakers (18.2%) do not use any distributors. Seven (21.2%) cheesemakers use one distributor, four (12.2%) use two, and six (18.2%) use three. Almost a third ($n = 10$; 30.2%) use four or more distributors.

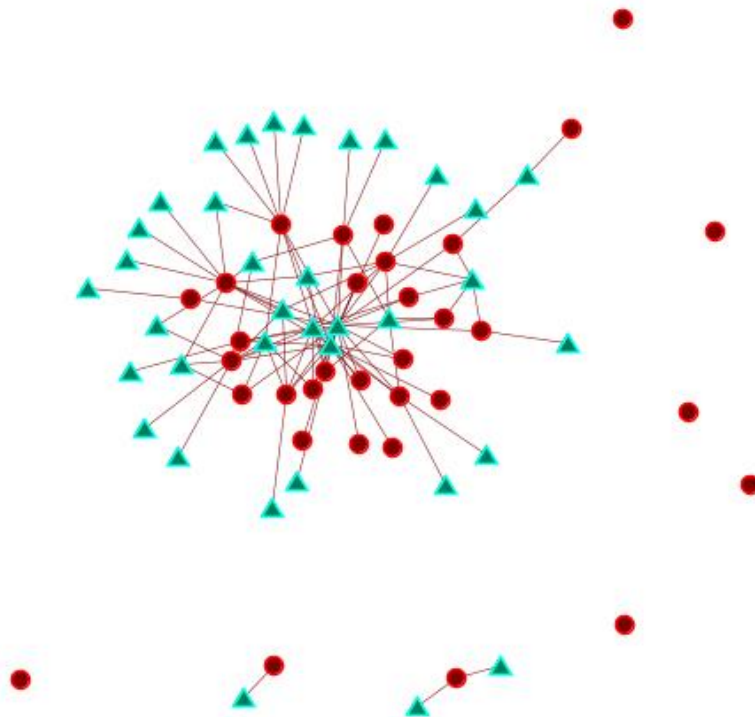


Figure 8. Network map showing connections between cheesemakers (red circles; $N = 33$) and distributors (blue triangles; $N = 36$)

In-degree centrality was examined in order to gauge distributor connectivity in the network. The maximum number of in-links to a distributor was 22, the minimum was 1,

and the average was just under 3 ($M = 2.861$, $SD = 4.191$). It was a right-tailed, positively skewed degree distribution, with just under two-thirds (63.9%) of distributors having a single tie and very few at the top with several ties. Table 10 displays the centrality scores for distributors categorized as high, medium-high, and medium-low. Those distributors categorized as low with only 1 tie ($n = 23$) were not included.

Table 10

Distributors ($N = 36$) Ranked by Centrality Score

Rank	Distributor	Centrality Score	# of Ties	
1	DIST-25	0.667	22.000	
2	DIST-9	0.394	13.000	HIGH
3	DIST-29	0.333	11.000	
4	DIST-13	0.152	5.000	
4	DIST-28	0.152	5.000	MEDIUM-
4	DIST-33	0.152	5.000	HIGH
5	DIST-36	0.121	4.000	
6	DIST-15	0.091	3.000	
6	DIST-35	0.091	3.000	
6	DIST-8	0.091	3.000	MEDIUM-
7	DIST-2	0.061	2.000	LOW
7	DIST-5	0.061	2.000	
7	DIST-6	0.061	2.000	

Note. Includes only distributors with 2 or more ties.

Three distributors stand out from the rest with regard to their centrality in the network with more than 10 links each. Two-thirds of cheesemakers (66.7%) use DIST-25 (22 ties); over one-third (39.4%) use DIST-9 (13 ties); and one-third (33.3%) use DIST-29 (11 ties). Table 11 below presents some contextual information about the top-most central distributors (i.e., those categorized as high or medium-high).

Table 11

Characteristics of Distributors with High and Medium-High Centrality

Code	Location	Distribution region	Customers	Products	Stated emphasis
DIST-25	White River Junction, VT	VT, NH, ME, MA, NY	Restaurants, food co-ops, independent grocers, and specialty food stores	Artisan cheese, oil and vinegar, preserves, meat, fish & poultry, grains, beans, herbs & spices; no produce	Fine specialty foods from around the world
DIST-9	North Springfield, VT	VT, NH, MA, NY	Restaurants, institutions, retail stores	Produce, fresh seafood, artisan cheese, meats, dairy, and dry goods	Local, all-natural foods; fresh produce
DIST-29	Lynn, MA	New England and New York	Independent retailers, specialty food shops, farm stands, supermarket chains	Cheese, specialty meats, pates & foie gras, pasta, specialty grocery items, chocolates, fruit preserves, rice, polenta, condiments & sauces, honey, salts, spices, antipasti, truffles, dried mushrooms	Specialty cheeses and fine foods from around the world

DIST-13	Brooklyn, NY	NYC metropolitan area	“New York’s finest mongers”	Cheese (American & European), charcuterie, and accompaniments	“smaller producer cheeses”; “cheeses from the best small producers who seek to be on NYC cheese plates”
DIST-28	Brooklyn, NY	--	Restaurants, retail shops	Cheeses and dairy products	“Purveyors of fine American farmstead cheese”
DIST-33	White River Junction & Waterbury, VT	VT, NH	Restaurants, retailers	Fresh fruits and vegetables, cheese, meats, dairy/eggs	Local first; fresh, seasonal produce
DIST-36	Armonk, NY	Delivers to mid-Atlantic (CT to VA); delivers to NYC 4x week; ships across US	“Gourmet retail markets”	Cheese, other dairy, crackers, meats & pates, condiments, baked goods	Specialty cheeses

Note. Includes only distributors with high (more than 10) and medium-high (more than 3) centrality. “--” = information could not be located.

As Table 11 indicates, both DIST-25 and DIST-9 operate out of Vermont, whereas DIST-29 is based out of the Boston area, but all three companies distribute in the New England/New York region. It appears that DIST-25 and DIST-29 have the broadest geographic service range. Findings from cross tabs in SPSS suggest that cheesemakers who are connected to DIST-25 tend to be present in several states. Taken together, it

appears that these three distributors provide many Vermont cheesemakers with a way to reach regional markets.

Another common factor among the top-most central distributors appears to be a specific focus on, and commitment, to artisan cheese and cheesemakers in the region. For instance, DIST-25's website highlights their "partnerships with New England cheesemakers," saying: "We are especially proud to be in an area where so many talented and exceptional cheesemakers reside and practice their art. We are delighted to distribute these local artisan dairies." Their website also features a list of "local" cheesemakers they work with, which includes several of the Vermont producers in this study. Likewise, the website of DIST-9 claims that they have "developed great relationships with artisanal cheese makers in Vermont, New Hampshire and Massachusetts," and "are continuously adding new local artisan cheeses to further expand our already extensive list of regional cheese."

In contrast, third-ranked DIST-29 appears to focus their efforts less on "local" artisan cheesemakers than the other two distributors, which is perhaps related to their out-of-state, more urban location. Moreover, in addition to being a wholesale distributor for the Northeast region, DIST-29 is an international importer of cheese and other specialty food items from around the world. Thus, while they carry several Vermont cheeses, they appear to place a greater emphasis on their relationships with European producers.

At the other end of the degree distribution, where the majority of distributors are located with one link, it is hard to pinpoint a single type, but one unanticipated category that emerged is Vermont dairy farms and creameries. For example, Cheesemaker 44 identified two nearby dairies—a small, family-owned dairy located in Rutland and a

third-generation dairy farm located in Middlebury—as moving some of their cheese. Also low on centrality are distributors of a larger scale and broader scope, such as DIST-32 (1 tie), the “leading independent national distributor of natural, organic and specialty foods and related products including nutritional supplements, personal care items and organic produce, in the United States.” Thus, there appears to be a “sweet spot” for Vermont artisan cheesemakers when it comes to distributors—not too small or local, but not too large or national. Mid-sized, with regional reach and a focus on cheese seems to be key.

With regard to out-degree centrality, the maximum number of distributors used by a cheesemaker was 12, while six cheesemakers had 0 distributor ties. On average, cheesemakers use 3 distributors ($M = 3.121$; $SD = 3.063$). Table 12 displays the centrality scores for cheesemakers ($N = 33$), categorized as high, medium, and low.

Table 12

Cheesemakers ($N = 33$) Ranked by Centrality Score (Distributor Ties)

Rank	Cheesemaker Code	Centrality Score	# of Ties	
1	35	0.333	12	
2	29	0.278	10	HIGH
3	76	0.250	9	
4	69	0.222	8	
5	16	0.167	6	
5	46	0.167	6	MEDIUM
5	83	0.167	6	
6	23	0.139	5	

7	38	0.111	4	
7	63	0.111	4	
8	22	0.083	3	
8	27	0.083	3	
8	41	0.083	3	
8	51	0.083	3	
8	59	0.083	3	
8	82	0.083	3	
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9	21	0.056	2	
9	37	0.056	2	
9	44	0.056	2	
9	61	0.056	2	LOW
10	19	0.028	1	
10	20	0.028	1	
10	32	0.028	1	
10	53	0.028	1	
10	68	0.028	1	
10	78	0.028	1	
10	81	0.028	1	

Note. Cheesemakers with 0 distributors ($n = 6$) not shown.

Table 13 below presents some of the characteristics of the top-most central cheesemakers in the cheesemaker-distributor network (i.e., those categorized as high centrality). Common attributes among these high-ranking cheesemakers include being in the cheesemaking business for a relatively long time (more than 10 years), having

relatively high volume and sales, and having several employees (more than 12 full-time). Moreover, based on the observation that these four highly-central retailers had ties in several states (six or seven), we conducted a correlational analysis and found a strong positive correlation between the number of states a cheesemaker has retailer ties to and their centrality in the cheesemaker-distributor network, $r = .733, p < .001$.

Table 13

Characteristics of Cheesemakers with High Centrality (Distributor Ties)

Code	Total Links	# of Years	# of Styles	Sales	Pounds	Employees
35	125	120	5	\$5,000,000	1,200,000	35 (47)
29	78	20	4	\$650,000	200,000	12 (19)
76	25	10	2	-	-	27 (47)
69	113	10	8	\$6,000,000	600,000	32 (32)

Note. “-” = no information provided; “# of years” = number of years as a licensed cheesemaker in VT; “# of styles” = number of different styles of cheese produced; “Sales” = gross annual sales last year; “Pounds” = volume of cheese produced last year; “Employees” = number of full-time employees, with number of part-time and seasonal employees in parentheses.

It is also worthwhile to note that the top-most central cheesemakers in the distributor network are also highly central in the original cheesemaker-retailer network. The fact that we see the same cheesemakers as generally high in centrality in both networks suggests a positive correlation between a cheesemaker’s total number of retailer links and their number of distributors. Indeed, a correlation analysis indicates that there is

a significant and very strong, positive relationship between these two variables ($r = .821$, $p < .001$). This also suggests that it is possible for cheesemakers to use distributors and still maintain some awareness of where their cheese is going.

However, it is important to re-emphasize the limitations of the survey regarding its self-report nature and the potential for cognitive burden. For instance, Cheesemaker 76 reported using nine distributors but identified just 25 retailer links on the survey. It seems unlikely that each distributor would only sell to one or two retailers, suggesting that 25 total links may be a gross underestimate. A potential reason for this is that, when using a distributor(s), cheesemakers are not as aware of specific retail locations and so were unable to report an accurate number of total links on the survey. Interestingly, though, this lack of awareness may not be perceived by cheesemakers as a negative thing. For example, Cheesemaker 21 (2 distributors, 11 total ties) wrote: “We have little interest in where are [sic] cheeses are distributed, due to the ‘no employees’ and ‘real dairy farm’ attributes of our business.” Thus, the use of distributors, and concomitant loss of control and knowledge of where your cheese is sold, may be seen as a benefit because it allows cheesemakers more time to focus on production instead of shipping and sales.

Direct Retail vs. Distributors

The vast majority—almost three-quarters (74.3%)—of cheesemakers in the sample use a combination of distributors and direct sales to get their cheese to retailers. In order to further explore the role that distributors might play in increasing or reducing direct relationships between cheesemakers and retailers, we created a scatter plot graph that shows each cheesemaker’s number of distributors in relation to their number of retailers. While one might expect to see a negative correlation between the number of

distributors and direct links, such that the more distributors one uses, the less direct links one has, we found a much more complex relationship (Figure 9).

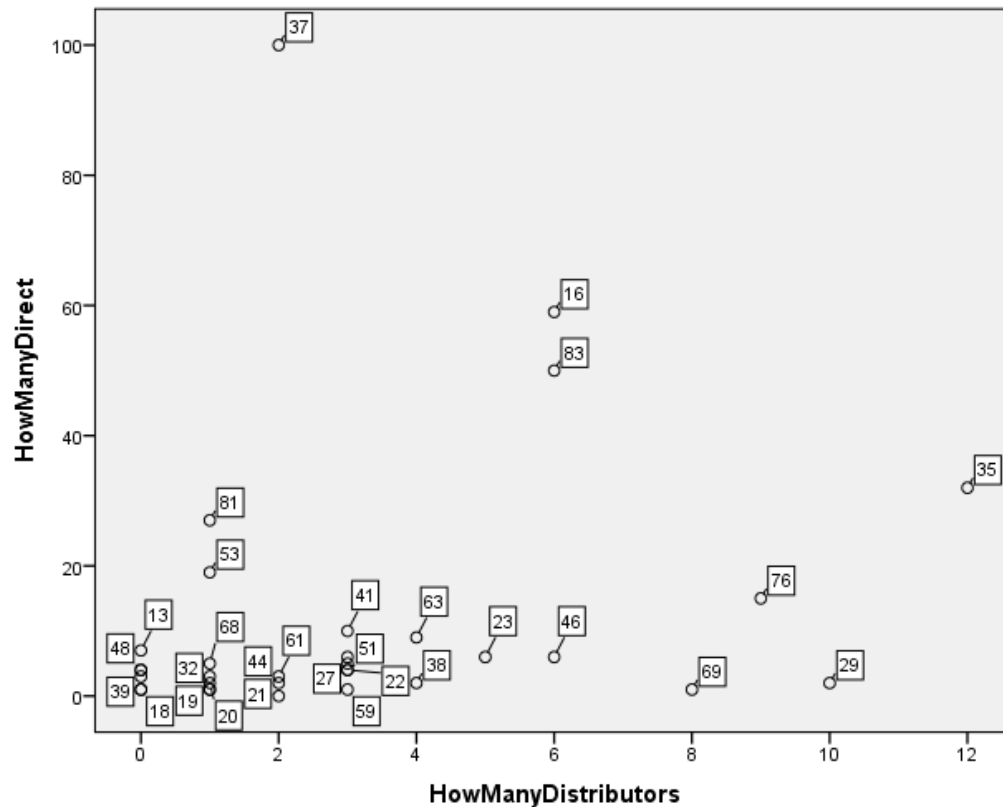


Figure 9. Scatter plot showing cheesemakers' ($N = 33$) number of direct ties (x-axis) versus their number of distributor ties (y-axis)

Overall we can see that the majority of cheesemakers are clustered in the lower left corner of the scatter plot, at the lower end of both direct retail ties and distributor ties. Many of these are the small-scale producers, with few employees and low production volumes. Those who were on the lower end of centrality in the original network (i.e., those that reported only one or two ties on the survey) are part of this group.

Moving right along the x-axis, we see a handful of cheesemakers that are high on distributor ties and low on direct retail links. These cheesemakers appear to rely heavily on distributors to move their cheese to retail, and perhaps do not have the infrastructure or desire to deal with direct sales and shipping. For example, the Sales Manager at Cheesemaker 29, with 10 distributor ties, told me that their model is “mostly distributors” with the exception of two local retail outlets—a brewery and a general store—both under 30 minutes away by car. Yet, it does not seem to be as simple as a story of proximity. Some cheesemakers reported selling directly to retailers not by choice but because their distributors do not, or will not, go there. For instance, Cheesemaker 76 (9 distributors, 15 direct retail ties) told me that “every now and then” they sell directly or do direct delivery, especially if it is in a location where they do not have a “strong distributor presence.” She cited the case of New York City as an example; because they lack a strong distributor there, they drive their own truck down once a week. Apart from that, most of their business—even their most local store—happens through distributors.

In contrast to the obstacle perceived by Cheesemaker 76 regarding distributors not physically going to stores they sell to, Cheesemaker 16 (6 distributors, 59 direct retail ties) discussed the opposite situation, in which a particular retailer will *only* sell your cheese if you work with a given distributor: “We sell to so many places that go through a distributor. Sometimes we’ll identify a retailer we want to work with [and] then ask, ‘Who do you use for a distributor?’” She also noted that, when there is the option of whether to sell direct or use a distributor, there is a calculus involved that has to do with shipping time and format: “If we can get to 1 or 2 day UPS ground—any format smaller than a 40-pound block—then we’ll ship it.” However, if they need to transport multiple

40-pound blocks, or it takes more than 1 or 2 days with UPS ground, then they will opt to use a distributor to truck it or sell it. Clearly, logistical considerations should not be overlooked in understanding why a cheesemaker sells direct or chooses to go through a middleman, and it can help us understand why many cheesemakers utilize both strategies.

Another interesting case to consider is that of Cheesemaker 35, which ranked first in overall centrality (125 links), and has the highest number of distributor ties (12) and a relatively high number (50) of direct retail ties. This hybrid pattern of distribution is not necessarily by design or by choice. A Sales Manager described their current situation in an e-mail: “We do ship direct to some Retailers and a few restaurants, unfortunately. We’d prefer not to but it’s hard to move folks to distributors[,] especially some of these folks [who] have been buying from us for a long time.” Given that they have been in business longer than any other cheesemaker in Vermont, this suggests that increasing scale over time may result in tensions between old relationships and new ones: “We prefer to help grow our distributors and work with their sales teams ... but we get a lot of push back when we try to move folks over to distributors.” Thus, some retailers resist using a distributor model. Cheesemaker 35 continues to sell direct, even though they would prefer not to, seemingly because they feel a time-honored loyalty to them, suggesting that the social relationship is more important than the sales relationship.

While Cheesemaker 35 would not give me the full list of retailer names, they provided me with several examples. Among the list of 18, several were based either in the town where one of their two production plants is located or within an hour’s drive of one of their plants. Indeed, she noted: “Some of these folks are locals that can come and pick up at both our plants.” Store types in this local area ranged from typical—a food co-

op, grocery store, country deli, and market—to more atypical—farm stand, gift shop, 7-11, and a “maple museum.” They also sell to a handful of specialty cheese stores in Vermont, as well as in New York City and Boston. Interestingly, she noted that some of their retailers receive their cheese both directly and by ordering from one of their distributors, which invites the question of why a retailer would use both strategies. Is it a matter of getting a higher volume of cheese, a logistical issue, or could it be related to maintaining a direct relationship with the cheesemaker?

Finally, a very small group of cheesemakers have a high number of direct links and use few distributors. Cheesemaker 81, who uses only one distributor/online retailer based out of Connecticut, suggested that their relatively high number of direct ties (27)—which is higher than what he reported on the survey (23)—is purposeful, and almost seems to be a matter of pride: “90+ % to retail is direct ... Bottom line is we sell direct without the ‘help’ of distributors.” A more extreme case is Cheesemaker 37, who declined to share names but reported 100 direct ties and 2 distributors. Both of these numbers are much higher than the 38 ties they identified on the survey, suggesting that their underestimation was not a problem of ignorance but an indication of survey fatigue.

These last examples illustrate how the information collected during follow-up sometimes contradicted the information collected through the survey. In another example, Cheesemaker 83 reported 32 links on the survey; yet, during a follow-up phone call I was told by the same individual who completed the survey (a Sales/Marketing employee) that they sell directly 50 stores (they would not provide names). In addition, she identified six distributors, which suggests that their actual number of total links is much higher than

originally reported. This misreporting may have been due to survey fatigue, haste, or poor information management.

Emergent Patterns

This final section of the chapter investigates some of the patterns that emerged from the qualitative component of the SNA. Because the follow-up questions, conducted via phone and e-mail, allowed for an additional source of qualitative data, we are able to gain a better appreciation for the nuance, hybridity, and fluidity that exists in the network.

Nuance arises because cheesemakers adopt a combination of strategies, depending on their unique situations, to get their cheese to regional consumers. An especially good example is the variety of strategies used by cheesemakers to get their cheese to New York City. As noted previously, Cheesemaker 76 identified New York City as the primary place where they lack a strong distributor presence, leading them to truck a delivery there once a week. Another respondent, Cheesemaker 23, mentioned that they run seven farmers' markets per week in NYC through the Greenmarket (a network of large, outdoor urban farmers' markets in over 50 city locations), which makes up "a big chunk of our total sales." Thus, while there appears to be strong consumer demand, a lack of distribution companies serving this important regional market may be an obstacle for cheesemakers who do not have the time, infrastructure, or pursue a direct sales strategy. However, it appears that an alternative supply chain—a hybrid retailer-distributor—may be emerging to fill this need; I explore this strategy next.

When it comes to categorizing the various actors in the distribution network for Vermont artisan cheese, there is some degree of hybridity and fluidity. In particular, both RET-136 and RET-44—previously identified as central actors in the network—appear to

function as some kind of hybrid between a retailer and distributor. For example, Cheesemaker 27 wrote in an e-mail: “At this time [DIST-25] is the only straight up distributor that we use. [RET-136] and [RET-44] also act as distributors in a way.” Indeed, 13 cheesemakers identified RET-136 as a retailer in the original survey, and 5 (15.2%) identified it as a distributor during follow-up (coded as DIST-28), making it among the top 5 most central. In addition to two retail locations in New York City, RET-136 also sells wholesale to other retail shops and restaurants in the city. This is notable because, as mentioned above, there appears to be a problem of distributors not going there. In this way, RET-136 acts as a critical link to the NYC region.

The role of RET-44 as a hybrid-distributor appears to be more subtle, with only one cheesemaker explicitly identifying them as a distributor during follow-up. This may be because they only sell wholesale to *restaurants*—more than 20 in the Boston area, and some in NYC—which is typically categorized as food service rather than retail. This relates back to Cheesemaker 69’s comment that, “[RET-44] is the only retailer in this region (or anywhere, actually) that we sell to directly. But they’re also a wholesaler to restaurants so they buy significantly more volume than pretty much any other cheese shop could.” Thus, like RET-136, RET-44 is a critical actor in the regional distribution network for Vermont artisan cheese. Both source cheese directly from cheesemakers and then distribute it to urban consumers—both directly through their respective cheese shops and indirectly through restaurants or other cheese shops. Together, through their various alternative supply chain activities, it seems clear that these two retailers are critical to the success of Vermont artisan cheesemakers.

Finally, the hybridity and fluidity of supply chain actor categories points to an often overlooked distinction between sales and shipping processes. While many cheesemakers relinquish the rights and responsibilities to both when they contract with a distributor, this is not necessarily the only way to do it. For instance, Cheesemaker 29 identified working with an individual who is “more like a broker, but does some distribution.” The main difference between a broker and a distributor is that a broker arranges the sales but is not responsible for the shipping or physical transport of the product. Alternatively, Cheesemaker 61 reported that he does all of his own sales but only “physically goes to the stores closest to the farm.” For the rest, he enlists outside shipping and trucking services, such as a local distributor and trucking service based out of Vermont’s Northeast Kingdom. It is worth considering if maintaining some direct connection to retailers, for example, by handling sales and marketing yourself but contracting out transportation, may be a compromise to ensuring that social relationships can be built and the cheese story communicated.

Summary

In sum, the results of the SNA suggest that the social network for Vermont artisan cheese is a multiplex system in which a cheesemaker’s relationships and relative position in the network are the result of a complex balance—and sometimes compromise—between a cheesemaker’s needs, goals, and desires and their various retailers’ needs, goals, and desires. Moreover, geographic proximity, time, experience, convenience, cost, history, loyalty, and regard all appear to be important factors in the type of relationship cheesemakers have with retailers—and whether a relationship is established at all.

CHAPTER SEVEN

CONCLUSIONS

This thesis used a transdisciplinary, mixed-methods approach to explore the role of cheesemongers—highly specialized retail professionals—in social networks around Vermont artisan cheese. Ethnography first provided a rich account of how cheesemongers communicate specialized social information about Vermont artisan cheese to regional consumers in an everyday context. While participant observation provided a deep understanding of the values and practices of cheesemongers at one retail venue, the use of social network analysis allowed for visualization and analysis of Vermont cheesemakers' relationships with retailers on a broader scale. To achieve this analysis, an online survey collected relational data on Vermont artisan cheesemakers and retailers in the region. Network analyses provided information about quantity of ties, while statistical analyses and qualitative comments provided information about the quality of these relationships. In this final chapter I discuss major findings, draw conclusions, and provide recommendations for policymakers and future research.

Discussion of Findings

Through the ethnography, we can see the power of one relatively small retailer in shaping consumer preference for Vermont artisan cheese. The cheesemongers I worked alongside at Formaggio Kitchen are doing more than selling cheese; they are telling stories about the cheese and its journey from farm-to-cheese counter. Stories include the details of its production, such as who made it, where, how, and why, increasing transparency and allowing consumers to feel a connection to the origins of their cheese. Even if not explicitly, these stories communicate social and cultural values of producers.

When consumers are able to understand and appreciate the values of producers, and when they share these values, social relationships are formed.

While the story can be effectively conveyed through written signage at the point of sale, it is most powerful when told through conversation. We should not underestimate the power of regard in retail relationships; it is in the social interactions between cheesemongers and customers that the mutual sharing of knowledge occurs. The role of knowledge is key. Cheesemongers *know* something about the cheese that goes beyond their sensory training and experienced palates. It is this highly specialized social knowledge that enables cheesemongers to build social networks around Vermont artisan cheese.

The unique thing about cheesemongers' social interactions, compared to many other food retailers, is how they frequently combine conversation with tasting the cheese. Collectively, Vermont artisan cheese has earned the reputation of being good in some objective way. Two beat out hundreds of others to win first and second place overall at the ACS competition. However, the taste of cheese and the stories told about cheese are intimately connected; in everyday practices of consumption, they are inseparable. It is through the everyday practices of cheesemongers that retail overlaps with consumption practices and sensory experience and the physiological experience of taste. This puts cheesemongers in a unique position to influence consumer preference and enhance liking.

For several Vermont cheesemakers, Formaggio Kitchen serves as a gateway to large numbers of urban consumers. This reflects a larger pattern, especially outside of the state, of small specialty retailers—namely cheese shops and gourmet food stores—acting as champions of Vermont artisan cheese. At these venues, cheesemongers play leading

roles. However, the retailer category—even in the relatively small network of Vermont artisan cheese—is incredibly varied and diverse. From ultra-local general stores to large national supermarket chains, most Vermont cheesemakers rely on a diverse combination of retail venues—many without cheesemongers—to sell their cheese to consumers across the region. In reference to a local independent grocery store, one cheesemaker explained: “This is retail, but in an unconventional sense. As with many of the outlets I use now they do not have a ‘cheesemonger’ per se, but rather a purchasing contact point.” In general, the relationships between producers and retailers of Vermont artisan cheese are complex and dynamic in ways that cannot be predicted by simplistic characterizations of retail outlets.

While the relationships between Vermont cheesemakers and regional retailers are incredibly nuanced and context-dependent, they range from those that are highly social and personal in nature—like those at Formaggio Kitchen—to those based purely on business—illustrated by one cheesemaker’s comment: “Just a place that sells our cheese.” We can visualize this as a continuum, with sales relationships at one end and social relationships at the other (Figure 10). Comments gleaned from the survey typify the two extremes; however, it is important to note that this is not black-and-white, that many fall somewhere in between, and that the relative position on the continuum may not be static.

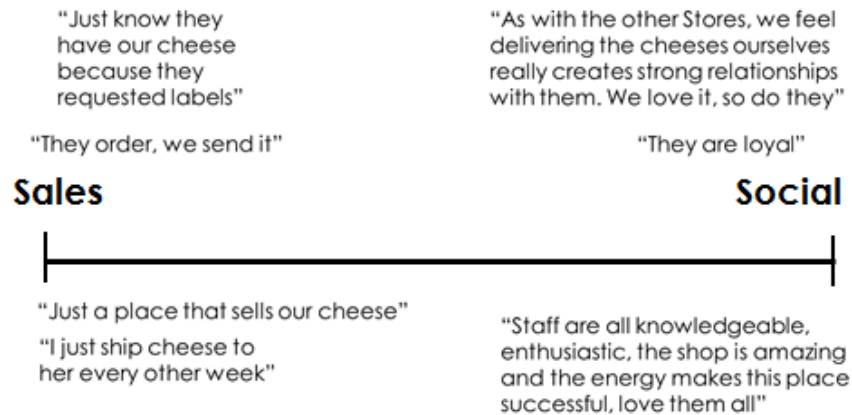


Figure 10. Continuum of sales and social relationships

More than just having a feel-good quality, strong social relationships between producers and retailers help to ensure the sensory quality of the cheese and lend authenticity to the cheese story. For the increasing number of consumers who want to know their farmer and where their food comes from, knowing the cheesemonger who knows the cheesemaker seems like the next best thing. In the absence of strong social relationships between cheesemakers and retailers, there is a danger that the story may not be conveyed accurately or effectively. If it is being told, it may only be through small labels on the cheese or through impersonal marketing materials. This is very different from a face-to-face social interaction, during which a cheesemonger can teach about and recommend cheeses based on his or her personal experience—both social and sensory. In this way, cheesemongers serve as a gateway to authenticity. If we take away the social values, relationships, and personal interactions that seem to give cheese stories an

element of depth, then we risk the story becoming shallow, two-dimensional marketing materials.

Scale

Scale emerged in this study as an important underlying issue that spans the realms of production, distribution, and retail. Cheesemongers often act as champions for small-scale artisan cheesemakers. By helping smaller producers locate and flourish in new, often large and urban, consumer markets, stores like Formaggio Kitchen help to increase the demand for their cheese. In order to meet the new demand, producers may opt to ratchet up supply by either acquiring more animals or hiring additional employees. While this may be positive from an economic standpoint, there will inevitably come a point at which producers can no longer meet demand without drastically expanding their operation and making fundamental changes to their vision, goals, and daily practices. Thus, a paradox arises, such that the very small-scale attributes that make a cheesemaker desirable or successful in the first place enable, and often encourage, growth. Paxson (2013) addresses the hard fact that, while success is necessary for cheesemakers' economic survival, it can also lead to losing some of the values that they began with:

A central challenge is to grow big enough to be economically viable without undermining the sentiments—daily, hands-on work with land and animals, joy in transforming milk into cheese, time with one's family, and so on—that inspired them to get into farming or take up cheesemaking in the first place. How might they turn qualities of good living into quantities that sustain their business, without selling out those very qualities? (p. 78)

Cheesemongers may be an important part of the answer, because they have the unique power to communicate the sentiments that influence consumer preference, which coincides with their willingness-to-pay. While it was beyond the scope of this study, an

economic analysis looking at the cost of cheese and the willingness-to-pay of consumers in a variety of retail venues—gourmet food shops versus chain supermarkets—is needed.

Distributors

The high prevalence of distributors contributed great complexity to the cheesemaker-retailer network. A sales employee and key informant at Cheesemaker 69 referred to this complexity as the “rabbit hole of distribution.” The use of distributors can prevent cheesemakers from knowing precisely which retailers sell their cheese. If there is no relationship, or even awareness on the part of cheesemakers, this presents a major obstacle to conveying the story to consumers at that venue. Even if a cheesemaker who uses a distributor is aware that their cheese is sold at a particular retailer, the intermediary presence of that distributor can disrupt the flow of information. For example, Cheesemaker 21 said of a specialty cheese store near Burlington, VT: “They buy cheese from the distributor, therefore we have no information about [percent] of sales.” In addition to sales information, the flow of social information (i.e., the story) may also be impeded. Figure 11 illustrates how the strength of information flow may become weaker when cheese is sold through a distributor rather than directly from cheesemaker to retailer.

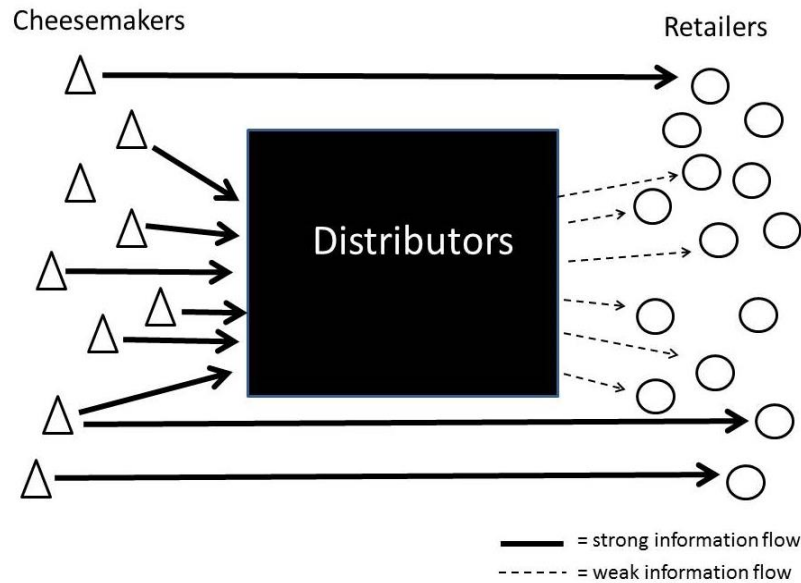


Figure 11. Schematic of information flow through distributors

This appears to be a structural problem. When cheesemakers reach a certain scale of production and have saturated their in-state markets, it becomes advantageous to use distributors. Realistically, cheesemakers do not have the time to go to every little cheese shop and ask them to carry their cheese. Moreover, transaction costs associated with continually receiving orders, billing, and coordinating shipping logistics are high for maintaining direct ties. Likewise, retailers must have the necessary infrastructure, resources, and motivation to work directly with producers. In the case of Formaggio Kitchen, the importance of knowing the place and the producers by working directly with them is deeply embedded in their store philosophy. But this model is not sustainable for all stores. In this way, distributors are important for expanding into regional markets because they reduce transaction costs and help producers to, in the words of one monger, “spread their cheese wide.” But increasing width may require a trade off in depth, which

is represented by retailer knowledge, communication of the story, and strong social relationships with retailers.

This begs the question of whether cheesemakers must make a choice between “going wide” and “going deep.” In theory, short food supply chains allow cheesemakers to achieve both simultaneously, and cheesemongers are the key figures in spatially proximate and spatially extended short food supply chains. Short food supply chains offer a way to conceptualize how cheesemongers communicate the social values and meaning of artisan cheese, thereby linking consumers to the place of production and shaping sensory preference. But, as we have determined, cheesemongers are only part of the picture. I wonder whether short food supply chains can work in practice without these highly specialized and knowledgeable retail professionals. In the burgeoning market for artisan cheese across the U.S., how can producers ensure that the unique value- and meaning-laden information associated with Vermont artisan cheese gets transferred to consumers?

At least one Vermont cheesemaker has recognized this challenge and begun to address it. This past fall, after I had completed my ethnographic fieldwork, the award-winning and nationally-recognized cheesemaker, Cellars at Jasper Hill, posted a job opening and description for a “meta-monger,” explaining:

As interest in Jasper Hill’s growing collection widens, a focus on the people out there who make it all possible is especially important – the cheesemongers. The highest-end cheeses don’t simply sell themselves off of supermarket shelves. They require special care, attention, and hand selling – someone to tell the story and put cheeses in end-customers’ mouths.

Notably, the meta-monger’s job would center on the “communication of our mission, progress, and vision for the future” and “relationship management with the sales teams of

distribution customers, as well as with the chefs and mongers these customers work with.” As all cheesemakers cannot afford to hire one person to exclusively visit and build relationships with retailers, perhaps this idea of a meta-monger can be adopted on a state-wide scale; a single individual whose sole responsibility is to act as a proxy for Vermont producers and tell the stories of their cheese.

Recommendations & Future Directions

While this thesis was a good start to understanding the complex role and relations of cheese retail professionals, it opens up several avenues for future research. First, analysis of the current data has not yet been exhausted. For instance, it may be useful from the perspective of cheesemakers to explore relationships between the various styles of cheese and the location or type of retailers. Additionally, someone trained in GIS could geo-locate the retailers and cheesemakers to investigate whether spatial proximity plays a role in either the quantity or quality of relationships.

Future studies should examine other types of retailers, especially those that emerged among the most central in this study. In particular, it would be interesting to examine the role of food co-ops in Vermont, which appear to have the infrastructure and motivation to work directly with producers. In addition, given their potential for reaching high volumes of regional and national consumers, we should devote attention to chain supermarkets. Does the story get conveyed in an authentic way in these more impersonal, corporate retail environments? If so, how? If not, how might other strategies (e.g., technology or social media) help to convey the story in a more personal and dynamic way than you could get from a label? Future studies might also expand the scope of the study to examine the relationships of Vermont cheesemakers with retailers on a national scale.

We should also delve deeper into the issue of production scale and how it relates to the story. When cheesemakers increase their scale of production to the point where they can expand beyond face-to-face short food supply chains, does the story itself, and how it is told, fundamentally change? What are the implications for sales versus social relationships?

In the food systems literature there has been a tendency to pay attention to the two ends of the supply chain: producers and consumers. Consequently, we know very little about actors in the middle of the supply chain. This study helped to address a gap in the literature by focusing deeply on the role of retailers in food supply chains, and in the process, it uncovered another gap: distributors. As the intermediary between producers and retailers, they necessarily have knowledge of both ties; they are the link. By turning our attention to what tools or resources they need in order to maintain a strong flow of communication, we could identify important leverage points. More broadly, food systems scholars should examine the role of distributors in other alternative agri-food chains, in order to identify opportunities and barriers for small to mid-size producers, and to better understand economic and social tradeoffs.

This study established a baseline from which to track the growth and evolution of the regional distribution network for Vermont artisan cheese. The results of the social network analysis provide a comprehensive visualization of the current regional distribution network for Vermont artisan cheese. Given the Farm to Plate goal of increasing Vermont-produced food consumption by both local and regional consumers, it may be fruitful to collect longitudinal data in order to monitor how the network grows and evolves over time.

While social network analysis provides one method to quantitatively assess relationships over time, future research should continue exploring ways to capture complex, dynamic social relationships. There are several inherent challenges in collecting this type of data. Researchers should try to figure out how to improve the quality of this type of data while limiting burden for participants.

On top of the complexity of studying social networks and relations, this thesis highlights the broader challenges of conducting transdisciplinary research. On one hand, its more holistic approach allows us to better understand the interconnectedness and complexity of the food system and its underlying issues. On the other hand, a transdisciplinary approach demands a broad set of skills and knowledge, which a single individual often does not have. The need for collaboration—the sharing of ideas, knowledge, and resources—across disciplines and domains is essential; ultimately, the individual researcher must be willing to sacrifice some intimate understanding of, and control over, the data.

If policymakers in Vermont are serious about the need for producers to expand into ever-more spatially extended supply chains, researchers must continue to explore ways to ensure that these are values-based food supply chains. The social values and relations that underlie processes of production and exchange are critical for consumers' appreciation of, and willingness to pay for, Vermont artisan cheese, the ability of Vermont cheesemakers to make a livelihood using small-scale productions practices, and the vibrancy of Vermont's regional food system. Finally, we need to recognize that this importance largely resides outside of the economic realm, and therefore, seek to find a way to account for it outside of the predominant economic system.

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Appendix

Survey: Regional Distribution Networks of Vermont Cheesemakers

I. Introduction & Informed Consent [not included]

II. Demographic Questions

1) What is the name of your business?

Note: This is necessary in order to be entered into the raffle; only cheesemakers who complete the survey will be entered, and we need to be able to identify those who complete it. If you are uncomfortable providing this information, or do not wish to be entered into the raffle, you may skip this question and continue with the rest of the survey.

2) How long (in years) have you been a licensed cheesemaker in Vermont?

3) From what animals' milk do you make cheese? (Check all that apply)

☐ Cow

☐ Goat

☐ Sheep

4) What style(s) of cheese do you produce? (Check all that apply) [Note: We recognize that there are many ways to classify cheese, and that many cheeses sometimes fit into more than one category. We are providing you with one basic categorization scheme].

☐ fresh

☐ soft bloomy rind

☐ soft washed rind

☐ soft natural rind

☐ blue veined

☐ white brined

☐ washed rind tomme

☐ natural rind tomme

☐ alpine/mountain

- ☐ pressed English and American styles
- ☐ Dutch styles (with eyes or open textures)
- ☐ hard Italian/grana style
- ☐ hard Italian/pecorino style
- ☐ pasta-filata
- ☐ Other(s): _____

5) Approximately how many pounds of cheese did you sell last year (total in all venues)?

6) What were your gross sales (in dollars) last year?

7) Which of the following best describes your production model?

- ☐ Cheese is made with milk from your own animals on the farm where the animals are raised
- ☐ Cheese is made with milk sourced from outside sources
- ☐ Combination of both
- ☐ Other: _____

8) How many people do you employ (not including yourself)?

Full-time: _____

Part-time year round: _____

Seasonal: _____

III. Who Do You Distribute To?

9) Below is a list of artisan cheese retailers located in New England and New York. Please go through the list, which is organized by state, and select those retailers that have sold your cheese within the past year (365 days).

Connecticut

- ☐ 109 Cheese Market (Ridgefield, CT)
- ☐ Artisan Food Store (Southbury, CT)
- ☐ Brie and Bleu (New London, CT)
- ☐ Caseus (New Haven, CT)

- ☐ Darien Cheese & Fine Foods (Darien, CT)
- ☐ Double L Market (Westport, CT)
- ☐ Fairfield Cheese Company (Fairfield, CT)
- ☐ Fairway Market (Stamford, CT)
- ☐ Fromage Fine Foods (Old Saybrook, CT)
- ☐ Labonne's Market (multiple locations, CT)
- ☐ Liuzzi Cheese (New Haven, CT)
- ☐ Please Say Cheese (Waterford, CT)
- ☐ Stew Leonard's (multiple locations, CT)
- ☐ Village Market (Wilton, CT)
- ☐ Walter Stewart's Market (New Canaan, CT)
- ☐ Whole Foods (multiple locations, CT)
- ☐ Wild Raspberry, The (Cromwell, CT)
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____

Maine

- ☐ Bangor Wine and Cheese Company (Bangor, ME)
- ☐ Blue Hill Co-op Community Market (Blue Hill, ME)
- ☐ Eat More Cheese (Belfast, ME)
- ☐ Five Islands Farm (Georgetown, ME)
- ☐ Freeport Cheese & Wine (Freeport, ME)
- ☐ Market Basket, The (Rockport, ME)
- ☐ Perkins & Perkins (Ogunquit, ME)
- ☐ Rising Tide Community Market (Damariscotta, ME)
- ☐ The Cave (Brooklin, ME)
- ☐ The Cheese Iron (Scarborough, ME)
- ☐ Treats of Maine (Wiscasset, ME)
- ☐ Uncorked Wine & Cheese (Augusta , ME)
- ☐ Weatherbird (Damariscotta, ME)
- ☐ Whole Foods Portland (Portland, ME)
- ☐ Other [Please list store name and location]: _____

[] Other [Please list store name and location]: _____
[] Other [Please list store name and location]: _____
[] Other [Please list store name and location]: _____
[] Other [Please list store name and location]: _____

Massachusetts

[] American Provisions (Boston, MA)
[] Annys's Whole Foods (Nantucket, MA)
[] Bacco's Wine & Cheese (Boston, MA)
[] Bizalio's (Great Barrington, MA)
[] Bloomy Rind (Hingham, MA)
[] Boston Cheese Cellar (Boston, MA)
[] Central Bottle Wine & Provisions (Cambridge, MA)
[] City Feed and Supply (Jamaica Plain, MA)
[] Cornucopia Foods (Northampton, MA)
[] Dave's Fresh Pasta (Somerville, MA)
[] Falmouth Wines & Spirits (Falmouth, MA)
[] Fiddlehead Farm (West Tisbury, MA)
[] Formaggio Kitchen (Cambridge, MA)
[] Grand Trunk (Newburyport, MA)
[] Idylwilde Farm (Acton, MA)
[] Joppa Fine Foods (Newburyport, MA)
[] Marketplace at Guido's (Great Barrington, MA)
[] Nejaimes Wine Cellar (multiple locations, MA)
[] Ourglass Wine Co (Saugus, MA)
[] Pairings Wine and Food (Winchester, MA)
[] Pecorino, A Country Cheese Shop (North Grafton, MA)
[] Provisions...for Pantry & Cellar (Northampton, MA)
[] River Valley Market (Northampton, MA)
[] Roche Bros (multiple locations, MA)
[] Rubiner's Cheesemongers (Great Barrington, MA)
[] Russo's (Watertown, MA)
[] Savour Wine and Cheese (Gloucester, MA)
[] Sevan Bakery (Watertown, MA)
[] Shubies (Marblehead, MA)

- ☐ South End Formaggio (Boston, MA)
- ☐ State Street Deli (Northampton, MA)
- ☐ The Cave Gloucester (Gloucester, MA)
- ☐ The Cheese Shop of Concord (Concord, MA)
- ☐ The Spirited Gourmet (Belmont, MA)
- ☐ The Vin Bin (Marlborough, MA)
- ☐ Wasik's (Wellesley, MA)
- ☐ Whole Foods (multiple locations, MA)
- ☐ Windfall Market (Falmouth, MA)
- ☐ Wine & Cheese Cask, The (Somerville, MA)
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____

New Hampshire

- ☐ Abbey Cellars, The (Lincoln, NH)
- ☐ Angela's Pasta & Cheese Shop (Manchester, NH)
- ☐ Butter's Fine Food and Wine (Concord, NH)
- ☐ C'est Cheese (North Hampton, NH)
- ☐ Concord Cooperative Market (Concord, NH)
- ☐ Cornucopia Wine and Cheese Market (Exeter, NH)
- ☐ Hanover Food Co-op (Hanover, NH)
- ☐ Kearsarge Cooperative Grocer (New London, NH)
- ☐ Lebanon Food Co-op (Lebanon, NH)
- ☐ Walpole Grocery (Walpole, NH)
- ☐ Zeb's General Store (North Conway, NH)
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____

New York

- ☐ Abundance Cooperative Market (Rochester, NY)

- [] Adams Fairacre Farms (multiple locations, NY)
- [] American Cheese (West Sayville, NY)
- [] Artisanal Fromagerie and Bistro (New York, NY)
- [] Auray Gourmet (Larchmont, NY)
- [] Barnyard (Alphabet City, NY)
- [] Battery Place Market (New York, NY)
- [] Bedford Cheese Shop (Brooklyn, NY)
- [] Bedford Gourmet (Bedford, NY)
- [] Beecher's Handmade Cheese (New York, NY)
- [] Bernard's Market & Café (Glen Head, NY)
- [] Bierkraft (Brooklyn, NY)
- [] Bklyn Larder (Brooklyn, NY)
- [] Blue Apron Foods Ltd. (Brooklyn, NY)
- [] Blue Danube Gourmet to Go (Skaneateles, NY)
- [] Callicoon Wine Merchant & Windy Hill Cheese Shop (Callicoon, NY)
- [] Cavaniola's Gourmet (Sag Harbor, NY)
- [] Ceriello Fine Foods (multiple locations, NY)
- [] C'est Cheese (Port Jefferson, NY)
- [] Cheese Louise! (Kingston, NY)
- [] Chelsea Market Baskets (New York, NY)
- [] Citarella (multiple locations, NY)
- [] D. Coluccio & Sons, Inc (Brooklyn, NY)
- [] Despaña (New York, NY)
- [] Di Palo's Fine Foods (New York, NY)
- [] Dobbs & Bishop Fine Cheese (Bronxville, NY)
- [] Eastern District (Brooklyn, NY)
- [] Eataly (New York, NY)
- [] Eli's Manhattan (New York, NY)
- [] Eli's Vinegar Factory (New York, NY)
- [] European Cheese Shop (Rochester, NY)
- [] Fairway Market (multiple locations, NY)
- [] Formaggio Essex (New York, NY)
- [] Garden of Eden Gourmet (multiple locations, NY)
- [] Gastronomie 491 (New York, NY)
- [] Gourmet Garage (multiple locations, NY)

- ☐ Grab Specialty Foods (438 7th Ave, New York, NY, 11215)
- ☐ Grace's Marketplace (Long Island) (Greenvale, NY)
- ☐ Grace's Marketplace (New York, NY)
- ☐ Greene Grape Provision (Brooklyn, NY)
- ☐ Hawthorne Valley Farm Store (Ghent, NY)
- ☐ Honest Weight Food Coop (Albany, NY)
- ☐ Ideal Cheese Shop (New York, NY)
- ☐ Ithaca Coffee Company (Ithaca, NY)
- ☐ La Petit Fromagerie (Clinton, NY)
- ☐ Laraia's Cheese Shop (Nanuet, NY)
- ☐ Lucy's Whey (East Hampton, NY)
- ☐ Lucy's Whey Chelsea Market (New York, NY)
- ☐ Marlow and Sons (Brooklyn, NY)
- ☐ Murray's Cheese Shop (254 Bleeker St, New York, NY)
- ☐ Murray's Cheese Shop (Grand Central Station) (43rd St. & Lexington, New York, NY)
- ☐ Nickel City Cheese & Mercantile (Buffalo, NY)
- ☐ Putnam Market (Satatoga Springs, NY)
- ☐ Sahadi Importing (Brooklyn , NY)
- ☐ Saxelby Cheesemongers (New York, NY)
- ☐ Stew Leonard's (Yonkers, NY)
- ☐ Stinky Brooklyn (Brooklyn, NY)
- ☐ The Cheese Patch (Patchogue, NY)
- ☐ The Epicurean (Troy, NY)
- ☐ The Village Cheese Shop (Mattituck, NY)
- ☐ Todaro Bros (New York, NY)
- ☐ Union Market (Brooklyn, NY)
- ☐ Whole Foods (multiple locations, NY)
- ☐ Zabars (2245 Broadway, New York, NY)
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____

Rhode Island

- ☐ Alternative Food Co-op (Wakefield, RI)
- ☐ Eastside Marketplace (Providence, RI)
- ☐ Farmstead Inc (Providence, RI)
- ☐ Farmstead Lunch (Providence, RI)
- ☐ Le Petit Gourmet (Newport, RI)
- ☐ Milk & Honey Bazaar (Tiverton, RI)
- ☐ Sweet Berry Farm (Middletown, RI)
- ☐ Tony's Colonial Food Store (Providence, RI)
- ☐ Venda Ravioli (Providence, RI)
- ☐ Whole Foods (multiple locations, RI)
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____
- ☐ Other [Please list store name and location]: _____

Vermont

- ☐ Brattleboro Food Co-op (Brattleboro, VT)
- ☐ Castleton Village Store (Castleton, VT)
- ☐ Cheese House, The (Arlington, VT)
- ☐ Cheese Traders and Wine Sellers (South Burlington, VT)
- ☐ City Market (Burlington, VT)
- ☐ Fenix Fine Foods (Randolph, VT)
- ☐ Harvest Market (Stowe, VT)
- ☐ Healthy Living Market (Burlington, VT)
- ☐ Hunger Mountain Co-op (Montpelier, VT)
- ☐ Middlebury Natural Foods Coop (Middlebury, VT)
- ☐ Mountain Cheese and Wine (Stowe, VT)
- ☐ Putney Food Co-op (Putney, VT)
- ☐ South Royalton Market (South Royalton, VT)
- ☐ Sustainable Farmer (Windsor, VT)
- ☐ Sweet Clover Market (Essex, VT)
- ☐ Upper Valley Food Co-op (White River Jct., VT)
- ☐ Wine & Cheese Depot (Ludlow, VT)
- ☐ Woodstock Farmers' Market (Woodstock, VT)

[] Other [Please list store name and location]: _____

[] Other [Please list store name and location]: _____

[] Other [Please list store name and location]: _____

[] Other [Please list store name and location]: _____

[] Other [Please list store name and location]: _____

IV. Retailer-specific Questions

10) Do you use a distributor to get your cheese to [page("piped title")]?

- () Yes
- () No

11) What is the name of the distributor?

12) In the past year, approximately what percent of your total product was distributed to [page("piped title")]?

13) Approximately how long have you been selling your cheese to [page("piped title")]?

- () Less than a year
- () 1-2 years
- () 3-4 years
- () 5+ years

14) Which styles of cheese that you produce have been sold at [page("piped title")] in the past year? (Check all that apply)

15) How did your cheese first come to be sold at [page("piped title")]? (Check all that apply)

- [] By sending samples
- [] Because of a distributor
- [] Because of a particular cheesemonger who works/worked there
- [] Because of customer demand
- [] Other: _____

16) In the past year have you shared information about your cheese with cheesemongers at [page("piped title")]?

☐ Yes

☐ No

17) What kinds of information have you shared? (Check all that apply)

☐ Information about product(s)

☐ Information about your farm/dairy

☐ Information about production conditions

☐ Other [please describe]: _____

18) In the past year, approximately how often did you, or someone else at your company, correspond with cheesemongers from [page("piped title")], either by phone or email?

☐ At least once per week

☐ At least once per month

☐ At least once per quarter

☐ At least once every 6 months

☐ At least once per year

☐ Never

19) Have you ever met a cheesemonger from [page("piped title")] face-to-face?

☐ Yes

☐ No

20) How many times in the past year have you visited [page("piped title")]?

☐ Never this past year

☐ Never this past year, but at least once in the past 5 years

☐ Once or twice this past year

☐ Three or four times this past year

☐ Five or more times this past year

21) How many times in the past year has a cheesemonger from [page("piped title")] visited you at your farm/dairy?

☐ Never this past year

- ☐ Never this past year, but at least once in the past 5 years
- ☐ Once or twice this past year
- ☐ Three or four times this past year
- ☐ Five or more times this past year

22) If you know and are willing, please provide the name of your main point of contact at [page("piped title")].

This information is valuable because it allows us to confirm relationships, which in turn helps to establish strong, bidirectional relations in the social network analysis. We will not share or sell this information with anyone, and we will never use individual names when reporting and discussing results.

23) Use the text box below to clarify or elaborate on a response, or provide any additional comments or details that you feel are relevant to your relationship with cheesemongers at [page("piped title")] and may help us to better understand this relationship.

Thank You!